S/N No. : 9CD8302600

Service Manual

Digital Home Cinema System

Model: HC-4100/4200 Series

HC-4130(×) / HC-4230(×)
HC-4150(×) / HC-4250(×)
HC-4160(×) / HC-4260(×)
HC-4180(×) / HC-4280(×)

HC-4100(×) Series

HC-4200(×) Series

DIGITAL ADVANCED TECHNOLOGY

DAEWOO DAT CO., LTD.

JUN. 2004

DIGITAL HOME CINEMA SYSTEM

HC4100(×)/4200(×) Series

HC-4130(×) / 4150(×) / 4160(×) / 4180(×)
HC-4230(×) / 4250(×) / 4260(×) / 4280(×)

Contents

1. SAFETY PRECAUTIONS.....1/2

2. SPECIFICATIONS.....3

3. LOCATION OF USERS CONTROLS.....4/6
- FRONT PANEL
- REAR PANEL
- DISPLAY
- REMOTE CONTROLLER

4. CONNECTING TO EQUIPMENT.....7/8
- CONNECTING TO TV
- CONNECTING TO AUDIO & VIDEO
- CONNECTING TO SPEAKER
- CONNECTING TO RECORDING EQUIPMENT

5. FIRMWARE UPGRADE 9/10

6. TROUBLE SHOOTING GUIDE.....11/26

7. WAVEFORMS OF MAJOR CHECK POINT.....27/31
- AUDIO OUT SIGNAL WAVEFORM
- DAC OUTPUT SIGNAL WAVEFORM
- OPTICAL OUTPUT AUDIO DATA SIGNALFORM
- L/R CLOCK DATA WAVEFORM DURING NORMAL PLAY
- SERIAL DATA OUTPUT WAVEFORM DURING NORMAL PLAY
- Pr OUTPUT DATA WAVEFORM IN COMPONENT OUTPUT
- Pb OUTPUT DATA WAVEFORM IN COMPONENT OUTPUT
- Y OUTPUT DATA WAVEFORM IN COMPONENT OUTPUT
- COMPOSITEOUTPUT DATA WAVEFORM IN MONITOR OUTPUT
- S-VIDEO OUTPUT DATA WAVEFORM

8. INTERNAL BLOCK DIAGRAM OF ICs.....32/37

9. BLOCK DIAGRAM.....38/39
- MAIN BLOCK
- SMPS

10. WIRING DIAGRAM.....40/41

11. SCHEMATIC DIAGRAM.....42/51
- DVD Processor Section
- DVD RF Section
- Video & Analog Audio Section
- DDX Section
- PWM Amp. Section
- Front Section
- SMPS

12. PRINTED CIRCUIT DIAGRAM.....52/57
- Front
- Main
- SMPS

13. EXPLODED VIEW AND MECHANICAL PARTS LIST ..58/61
- MECHANICAL EXPLODED VIEW
- MECHANICAL PARTS LIST

14. ELECTRICAL PARTS LIST.....Appendix
- ELECTRICAL PARTS LIST
- ELECTRICAL PARTS LIST [OPTION LIST]

1. Safety Precautions

WARNING: TO PREVENT FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

	CAUTION RISK OF ELECTRIC SHOCKS DO NOT OPEN
CAUTION : TO REDUCE THE RISK IF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.	
	THIS SYMBOL IS INTENDED TO ALERT THE USER TO THE PRESENCE OF UNINSULTED "DANGEROUS VOLTAGE" WITHIN THE PRODUCT'S ENCLOSURE THAT MAY BE SUFFICIENT MAGNITUDE TO CONSTITUTE A RISK OF ELECTRIC SHOCK TO PERSONS.
	THIS SYMBOL IS INTENDED TO ALERT THE USER TO THE PRESENCE OF IMPORTANT OPERATING AND MAINTENANCE (SERVICING) INSTRUCTIONS IN THE LITERATURE ACCOMPANYING THE APPLIANCE.

CAUTION

TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS POLARIZED AC PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

LASER SAFETY

THIS UNIT EMPLOYS A LASER. ONLY QUALIFIED SERVICE PERSONNEL SHOULD REMOVE THE COVER OR ATTEMPT TO SERVICE THIS DEVICE DUE TO POSSIBLE EYE INJURY.

CAUTION : USE OF ANY CONTROLS, ADJUSTMENTS, OR PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

CAUTION : TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

ATTENTION : POUR EVITER LES CHOCS ELECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.

Important Safety Instructions

- All the safety and operating instructions should be read before the appliance is operated.
- The safety and operating instructions should be retained for future reference.
- All warnings on the appliance and in the operating instructions should be adhered to.
- All operating and use instructions should be followed.

1. Water and Moisture - The appliance should not be used near water - for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, and the like.

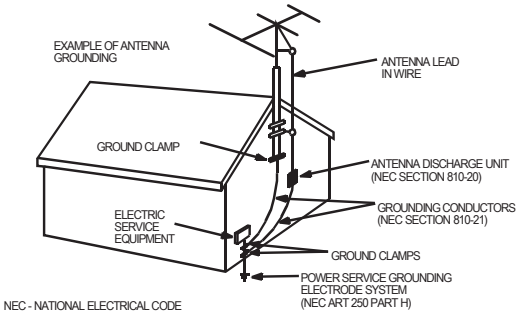
PORTABLE CART

Figure 2

2. Carts and Stands - The appliance should be used only with a cart or stand that is recommended by th manufacturer.
3. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.
4. Wall or Ceiling Mounting - The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
5. Ventilation - The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or, placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.
6. Heat - The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
7. Power Sources - The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
8. Grounding or Polarization - The precautions that should be taken so that the grounding or polarization means of an appliance is not defeated.
9. Power - Cord Protection - Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.
10. Protective Attachment Plug - If the appliance is equipped with an attachment plug having overload protection. This is a safety feature. See Instruction Manual for replacement or resetting of protective device. If replacement of the plug is required, be sure the service technician has used a replacement plug specified by the manufacturer that has the same overload protection as the original plug.
11. Cleaning - The appliance should be cleaned only as recommended by the manufacturer.
12. Power Lines - An outdoor antenna should be located away from power lines.

1. Safety Precautions

13.Outdoor Antenna Grounding - If an outside antenna is connected to the receiver be sure the antenna system is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code, ANSI/NFPA 70, provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna-dis charge unit, size of grounding conductors,location of antenna-discharge unit, connection to grounding electrodes and requirements for the grounding electrode. See Figure 1.


EXAMPLE OF ANTENNA GROUNDING
ANTENNA LEAD IN WIRE
GROUND CLAMP
ANTENNA DISCHARGE UNIT (NEC SECTION 810-20)
GROUNDING CONDUCTORS (NEC SECTION 810-21)
ELECTRIC SERVICE EQUIPMENT
GROUND CLAMPS
POWER SERVICE GROUNDING ELECTRODE SYSTEM (NEC ART 250 PART H)
NEC - NATIONAL ELECTRICAL CODE

14.Non-use Periods - The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.

15.Object and Liquid Entry - Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.

16.Damage Requiring Service - The appliance should be serviced by qualified service personnel when:

a) The power-supply cord or the plug has been damaged; or

b) Objects have fallen, or liquid has been spilled into the appliance; or

c) The appliance has been exposed to rain; or

d) The appliance does not appear to operate normally or exhibits a marked change in performance; or

e) The appliance has been dropped, or the enclosure damaged.

17.Servicing - The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

2. Specifications

General specifications

Power supply Voltage (Option)	AC 110V ~ 127V or 220V ~ 240V (50/60Hz)	Power consumption	Standby 2.8Watt Operating 90Watt
		Dimensions (W x D x H) / Weight	430 x 380 x 55 mm / 6.7 kg

Front Amp. Section

POWER OUTPUT at 10% THD(RMS)	At 1KHz, 6 ohms	50W
THD(Total Harmonic Distortion)	At 1KHz, 10W	0.1%
Input Sen. / Impedance @ 1KHz, 47K ohms	VIDEO	200mV ±30mV/47K
Output Level/Impedance @ 1KHz	Tape Rec	200mV ±30mV/2.2K
Frequency Response(Analogue)	at 1W : VIDEO -3dB	20Hz~20KHz
S/N Ratio IHF-A Weighted	VIDEO	70dB
Subwoofer Turnover Frequency		≤120Hz
Channel Separation	1KHz	55dB

Center Amp Section

POWER OUTPUT at 10% THD(RMS)	At 1KHz, 6 ohms	50W
TOTAL HARMONIC DISTORTION	At 1KHz, 10W	0.1%
S/N RATIO, IHF-A FILTER	Rated Output	70dB
FRE. RESPONSE	1W	135Hz~18KHz

Rear Amp Section

POWER OUTPUT 10% THD(RMS)	At 1KHz, 6 ohms	50W
TOTAL HARMONIC DISTORTION	At 1KHz, 10W	0.1%
S/N RATIO DOLBY	Rated Output	65dB
FREQUENCY RESPONSE	1W	135Hz~18KHz

Woofer Section

POWER OUTPUT at 10% THD	At 100Hz, 4 ohms	80W
FREQUENCY RESPONSE	1W	20Hz~150Hz
S/N RATIO, IHF-A Weight		60dB

Video Section

Input Sen./Impedance	Composite Video(Video)	1Vp-p/75 ohm	±0.5 dB
Output Level/Impedance	Composite 75 ohm	1Vp-p/75 ohm	±0.5 dB
	S-Video(Y/C) 75 ohm(DVD only)	1Vp-p/ 0.286Vp-p	±0.5 dB
	Component Out(Y/ Cb/ Cr):Option	1Vp-p/0.7Vp-p/0.7Vp-p	±0.5 dB
Frequency Response	Ref 500KHz		5Hz~5.7MHz
Crosstalk	@1MHz	45dB	40dB
S/N Ratio	DVD	60dB	

FM Tuner Section (FM ANT Impedance : 75 ohms)

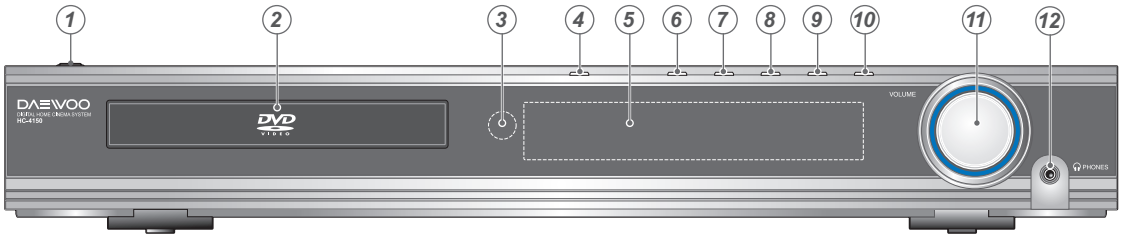
Tuning Range	USA Version	87.5~108.0MHz
	Australia/Europe Version	87.5~108.0MHz
Scanning Frequency Interval	USA Version	100KHz
	Australia/Europe Version	50KHz
Usable Sensitivity, 75 ohms	S/N=30dB,USA Version	2uV(17.2dBf)
	S/N=26dB ,Australia/Europe Version	3uV(20.8dBf)
S/N Ratio @1mV IHF-A FILTER	Mono USA Version	70dB
	Mono Australia/Europe Version	70dB
	Stereo USA Version	65dB
	Stereo Australia/Europe Version	63dB

Power output Table

Model	Power output at 10%THD(RMS)		Remark
	Front/Center /Rear	Woofer	
HC-4130 HC-4230	30 W, 6 ohm	50 W, 6 ohm	Same to "X" Series
HC-4150 HC-4250	50 W, 6 ohm	80 W, 4 ohm	
HC-4160 HC-4260	60 W, 6 ohm	100 W, 4 ohm	
HC-4180 HC-4280	80 W, 6 ohm	120 W, 4 ohm	

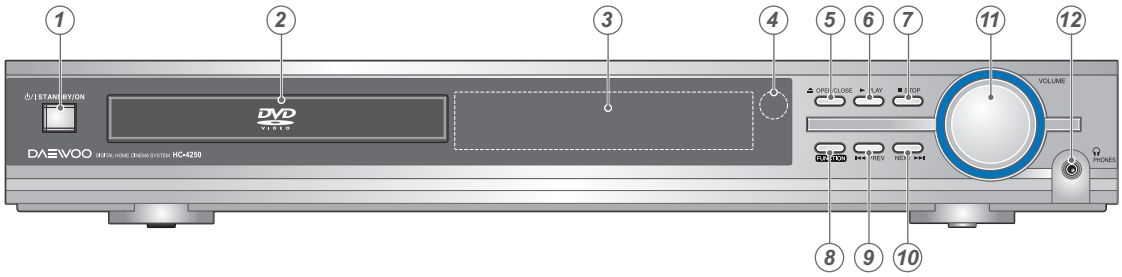
3. Location of Users Controls

• Front Panel : HC-4100(✕) Series Only



1. STANDBY/ON button with LED lamp
2. DISC TRAY
3. Remote Control Sensor
4. OPEN/CLOSE (▲) button
5. Display
6. PLAY (►) button
7. STOP (■) button
8. PREV (⏮) button
9. NEXT (⏭) button
10. FUNCTION button
11. MASTER VOLUME Control
12. PHONES jack

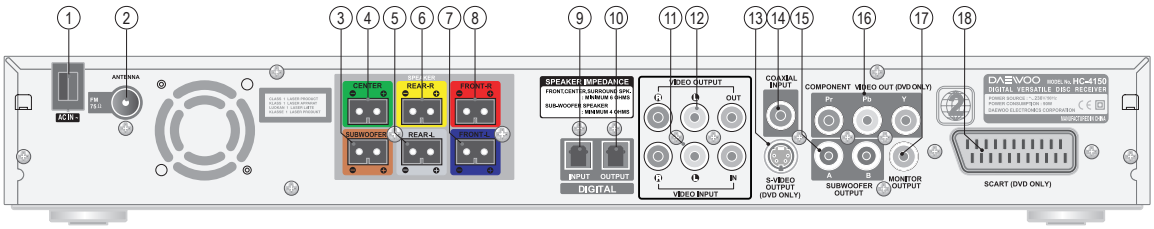
• Front Panel : HC-4200(✕) Series Only



1. STANDBY/ON button with LED lamp
2. DISC TRAY
3. Display
4. Remote Control Sensor
5. OPEN/CLOSE (▲) button
6. PLAY (►) button
7. STOP (■) button
8. FUNCTION button
9. PREV (⏮) button
10. NEXT (⏭) button
11. MASTER VOLUME Control
12. PHONES jack

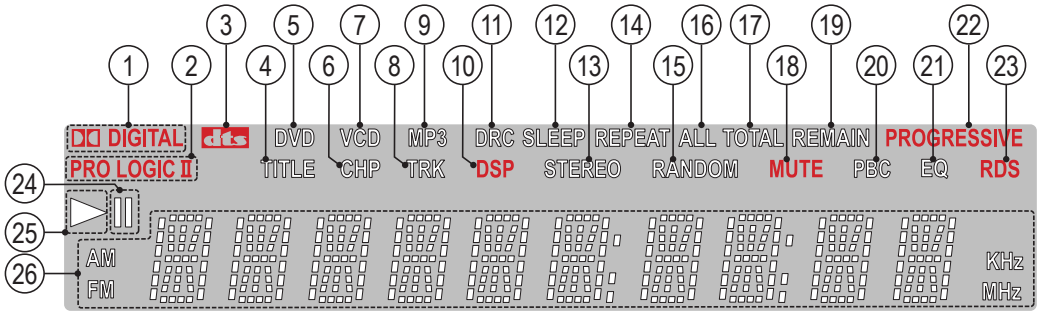
3. Location of Users Controls

• Rear Panel



1. Power cord
2. FM ANTENNA connector
3. SUBWOOFER SPEAKER connectors
4. CENTER SPEAKER connectors
5. REAR-L SPEAKER connectors
6. REAR-R SPEAKER connectors
7. FRONT-L SPEAKER connectors
8. FRONT-R SPEAKER connectors
9. DIGITAL INPUT jack
10. DIGITAL OUTPUT jack
11. VIDEO IN jacks
12. VIDEO OUT jacks
13. S VIDEO MONITOR OUT jack
14. COAXIAL INPUT jack
15. SUBWOOFER OUTPUT A/B connectors
16. COMPONENT VIDEO OUTPUT Y/Pb/Pr jacks
17. MONITOR OUT jack
18. SCART jack(Optional)

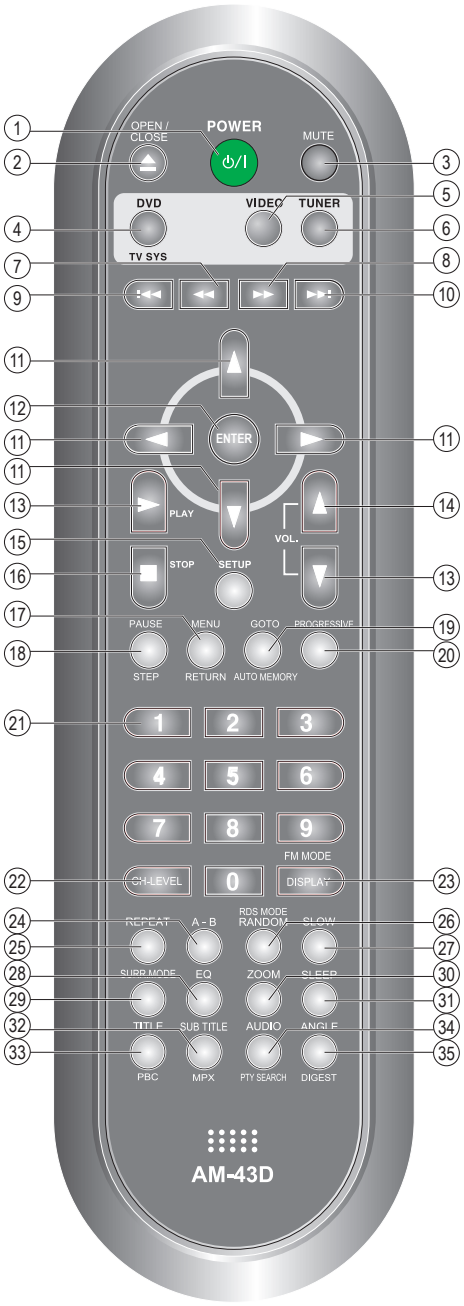
• Display



1. DOLBY DIGITAL indicator
2. Pro Logic II indicator
3. DTS indicator
4. TITLE indicator
5. DVD indicator
6. CHAPTER indicator
7. VCD indicator
8. TRACK indicator
9. MP3 indicator
10. DSP indicator
11. DRC indicator
12. SLEEP indicator
13. STEREO indicator
14. REPEAT indicator
15. RANDOM indicator
16. ALL indicator
17. TOTAL indicator
18. MUTE indicator
19. REMAIN indicator
20. PBC(Playback Control) indicator
21. EQ indicator
22. PBC(Playback Control) indicator
23. RDS indicator
24. PAUSE indicator
25. PLAY indicator
26. Multi-Function Information Displaying Area

3. Location of Users Controls

• Remote Controller

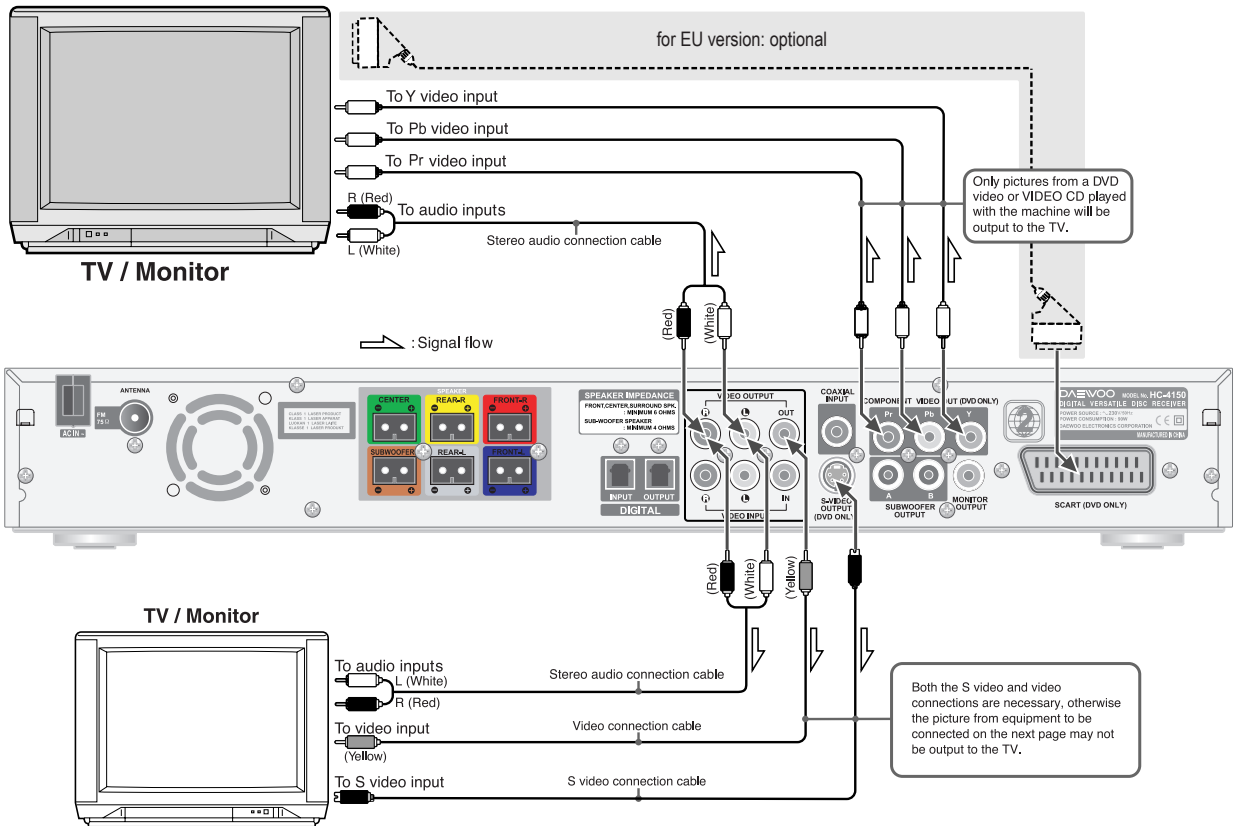


1. STANDBY/ON button
2. OPEN/CLOSE button
3. MUTE button
4. INPUT SELECTOR: DVD button/ TV SYSTEM(PAL/NTSC: DVD only) button
5. INPUT SELECTOR: VIDEO, TV/AUX button
6. INPUT SELECTOR: TUNER button
7. FAST REVERSE(FR) (◄◄) button
8. FAST FORWARD(FF) (►►) button
9. SKIP PREV (I◄◄) button
10. SKIP NEXT (►►I) button
11. Direction (▲/▼/◄/►) buttons
12. Enter button
13. PLAY (►) button
14. VOLUME(▲/▼) buttons
15. SETUP button
16. STOP(■) button
17. MENU/RETURN button
18. PAUSE/STEP button
19. GO TO/AUTO MEMORY button
20. PROGRESSIVE button
21. Number buttons(0~9)
22. CH-LEVEL button
23. DISPLAY/FM MODE button
24. A-B REPEAT button
25. REPEAT button
26. RANDOM/RDS button
27. SLOW button
28. EQ button
29. SURROUND MODE button
30. ZOOM button
31. SLEEP button
32. SUBTITLE/MPX button
33. TITLE/PBC button
34. AUDIO/PTY SEARCH button
35. ANGLE/DIGEST button

4. Connecting to Equipment

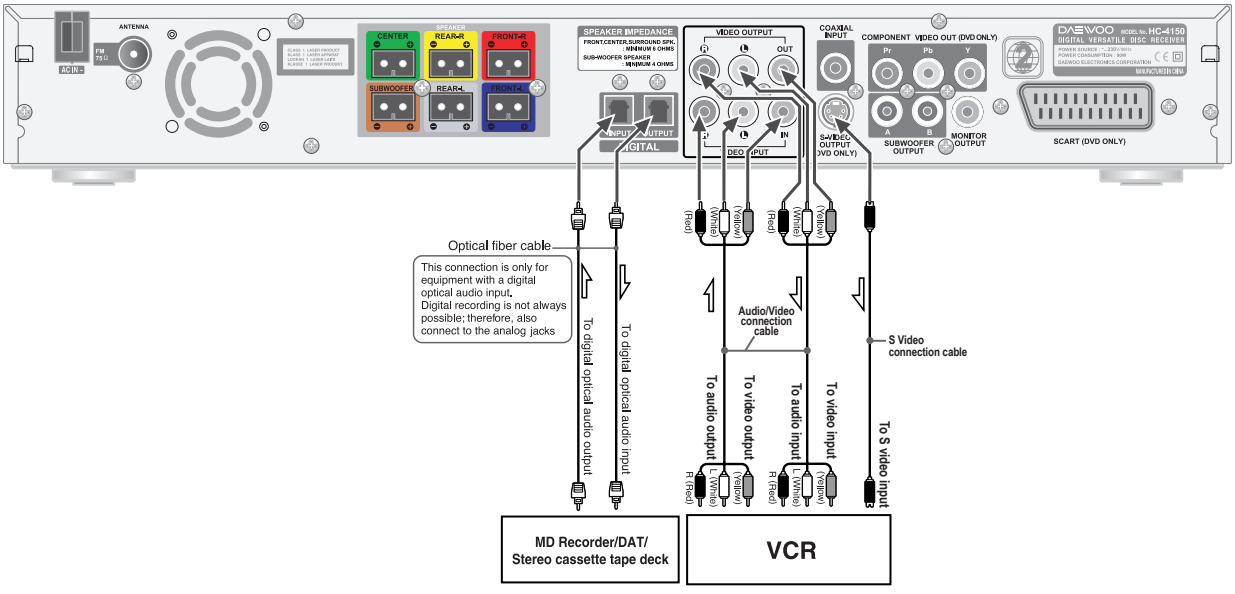
• Connecting to TV

- 21-Pin SCART Cable(not included) to 21-pin SCART input terminal on TV
- SCART Specification : Composite and Component Video output(DVD, Video)Audio L/R Output(DVD only)


for EU version: optional
To Y video input
To Pb video input
To Pr video input
R (Red)
To audio inputs
L (White)
Stereo audio connection cable
TV / Monitor
Only pictures from a DVD video or VIDEO CD played with the machine will be output to the TV.
: Signal flow
(Red)
(White)
(Yellow)
TV / Monitor
To audio inputs
L (White)
R (Red)
Stereo audio connection cable
To video input
(Yellow)
Video connection cable
To S video input
S video connection cable
Both the S video and video connections are necessary, otherwise the picture from equipment to be connected on the next page may not be output to the TV.

- If the TV or monitor is equipped with an S video input, make the S video connection in addition to the normal video connection. The S video connection will provide higher quality picture playback.

• Connecting to Audio & Video

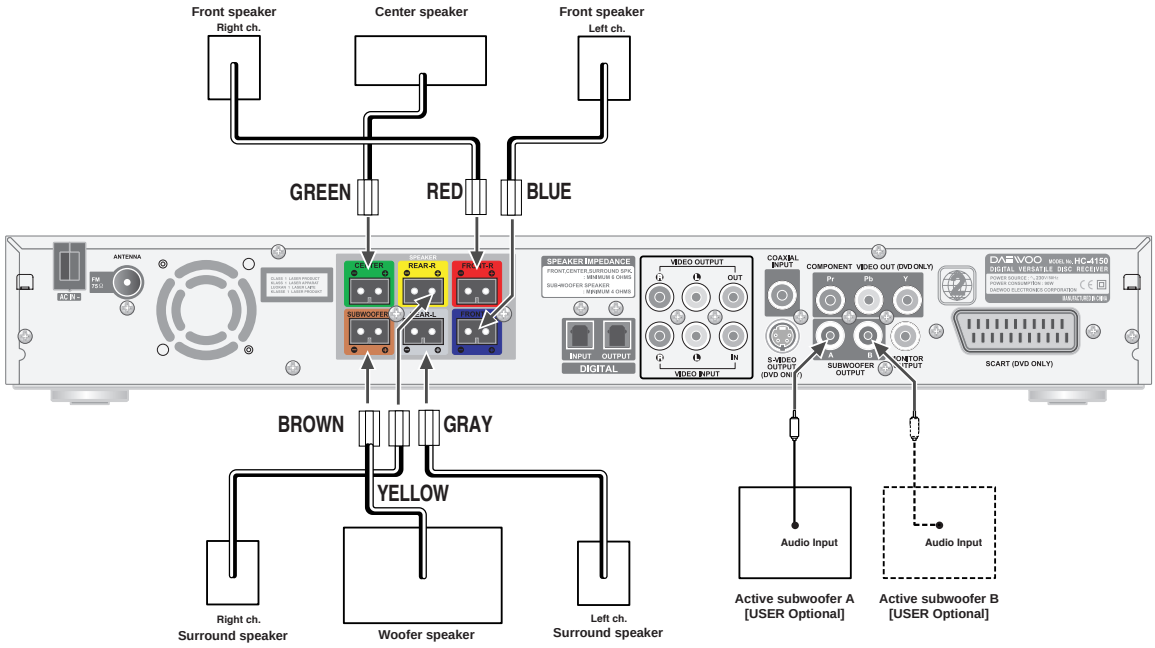

Optical fiber cable
This connection is only for equipment with a digital optical audio input. Digital recording is not always possible; therefore, also connect to the analog jacks
To digital optical audio output
To digital optical audio input
Audio/Video connection cable
S Video connection cable
To audio output
To video output
To audio input
To video input
To S video input
MD Recorder/DAT/ Stereo cassette tape deck
VCR

4. Connecting to Equipment

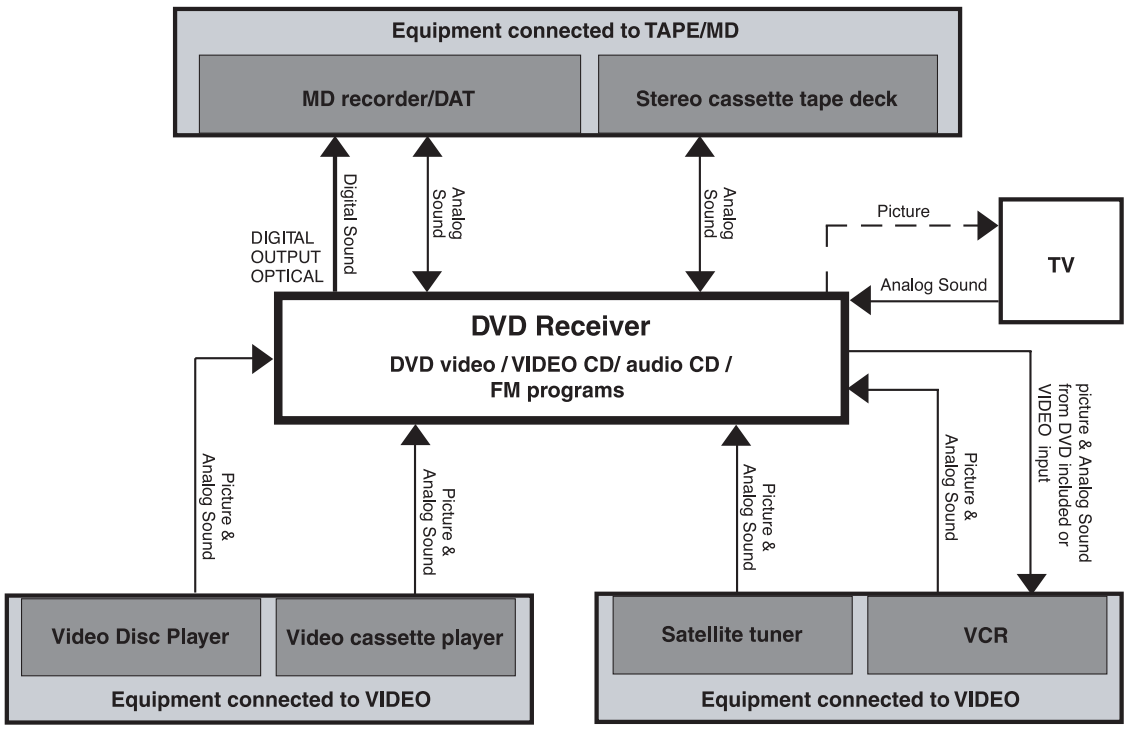
• Connecting to Speaker

◆ Before connecting

- This machine is designed to reproduce optimum sound quality when speakers with the specified impedance below are connected. Please check the following information and choose speakers with appropriate impedance for the connections.
  Front speakers / Center speaker / Surround Speakers : 6 ohms min. per speaker
  Woofer speaker : 4 ohm min. per speaker
- To prevent damage to circuits, never short-circuit the positive (+) and negative (-) speaker wires.
- Do not connect the speaker cable to the L and R connectors at the same time and do not connect more than one speaker to the same speaker connectors.



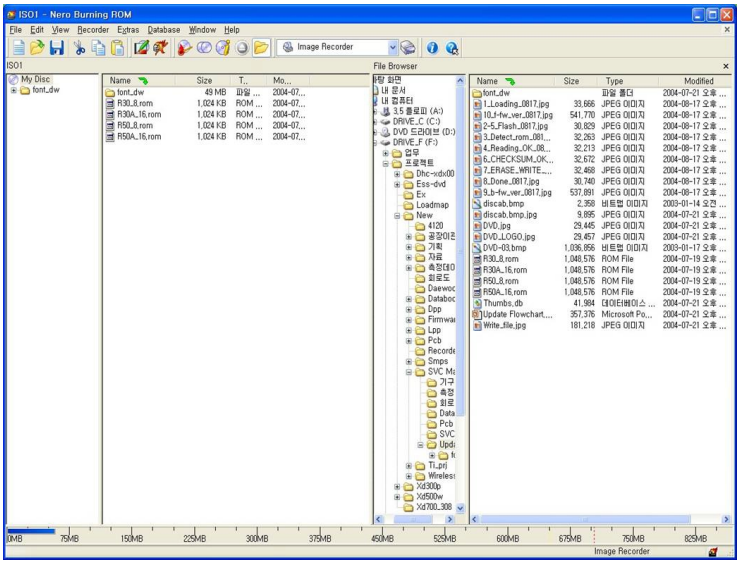
• Connecting to Recoring Equipment



5. Firmware Upgrade

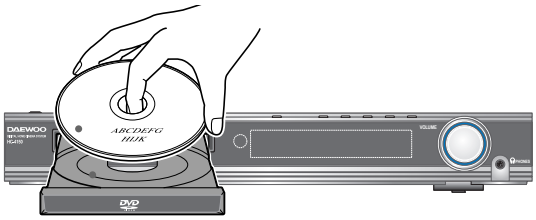
• Preparing the Firmware Upgrade

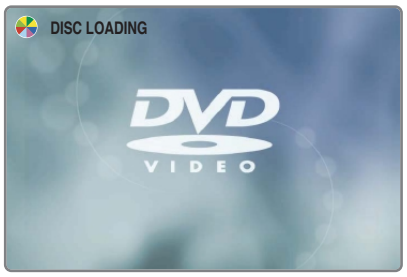
1. Write a disc to Update file by PC Writing Program.
2. A size of dummy folder is more than 10M bite. (ex : font_dw, attached picture)
3. Put Firmware file in a disc.
   - HC-XX50(✕)/60(✕) / 80(✕)
     - Basic :R50_8.ROM
     - DivX :R50A_16.ROM
   - HC-4130(✕) / 4230(✕)
     - Basic : R30_8.rom
     - DivX : R30A_16.rom



• Activating the Firmware Upgrade

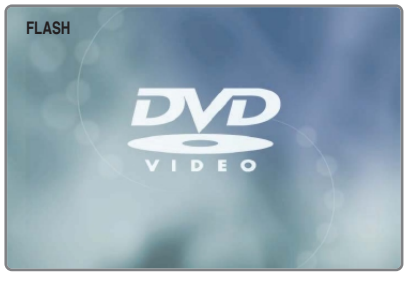
1. Open the Door of DVD Receiver.
2. Insert the Update Disc into the Disc Tray.
3. Close the Door, then DVD Receiver reads the disc, and Update the Firmware itself.





• Starting Update.

1. Detect the Update Disc.
2. Display for Update Version.
   - Basic Version : HC-4150 / 60 / 80, HC-4250 / 60 / 80 (R50_8.ROM)
   - Basic Version : HC-4130, HC-4230 (R30_8.ROM)
   - DivX Version : HC-4150 ✕ / 60 ✕ / 80 ✕, HC-4250 ✕ / 60 ✕ / 80 ✕ (R50A_16.ROM)
   - DivX Version : HC-4130 ✕, HC-4230 ✕ (R30A_16.ROM)



5. Firmware Upgrade

• Read the Disc, Checksum Check and Update New Firmware.

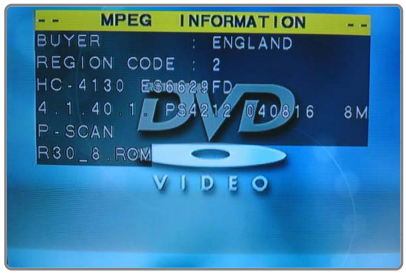
1. Automatically open the Door, after Read from Disc.
2. Take a disc out of a Tray.

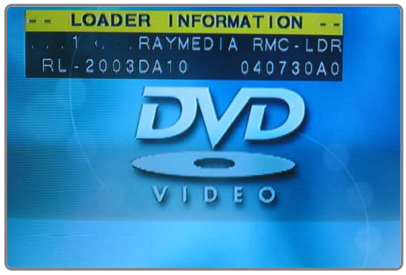
• Completed Update.

1. Automatically Power off (about 15 sec), after Complete Update.
2. Press Power Button, the System is working.

• Check the Update Version.

1. Open the Door of DVD Receiver.
2. Press Audio Button or Subtitle Button.
   - Audio Button : Check for MPEG Firmware Version.
   - Subtitle Button : Check for Loader Firmware Version.





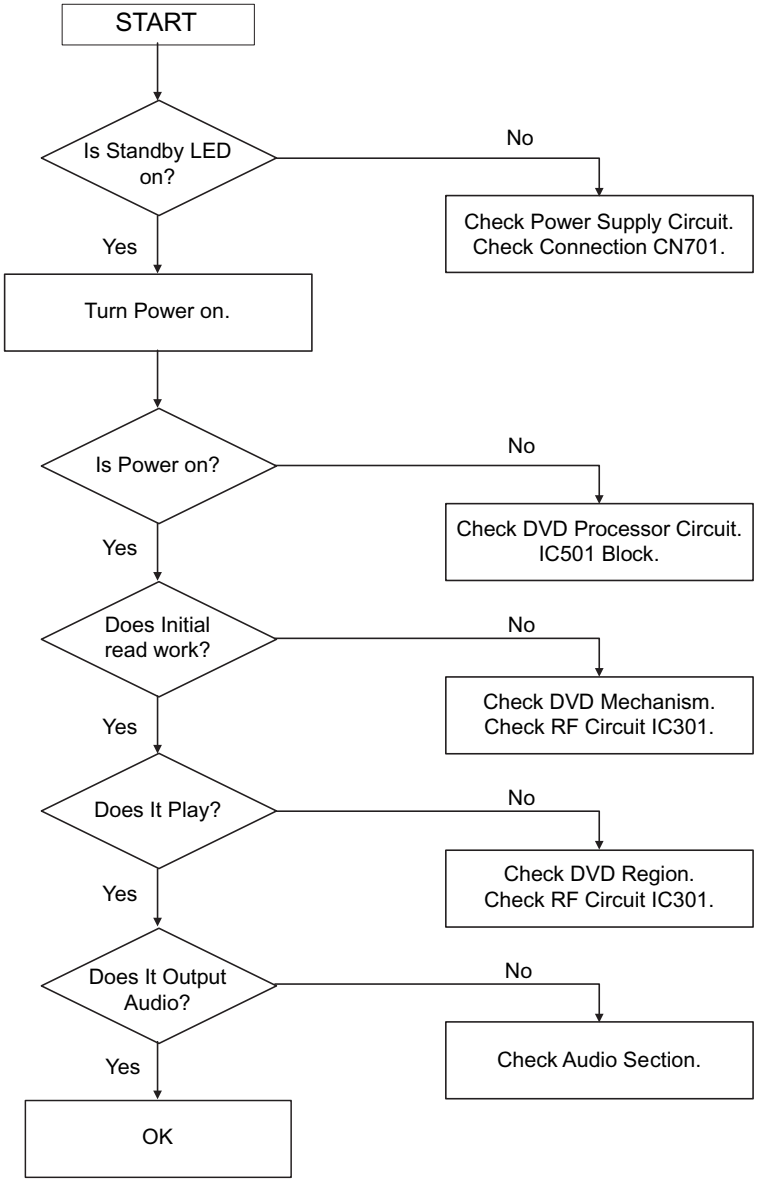
⚠ Caution

- While updating, if the door opened or closed by touch, or power button is pressed, the Flash Memory will be damaged.

6. Trouble Shooting Guide

• Audio Part

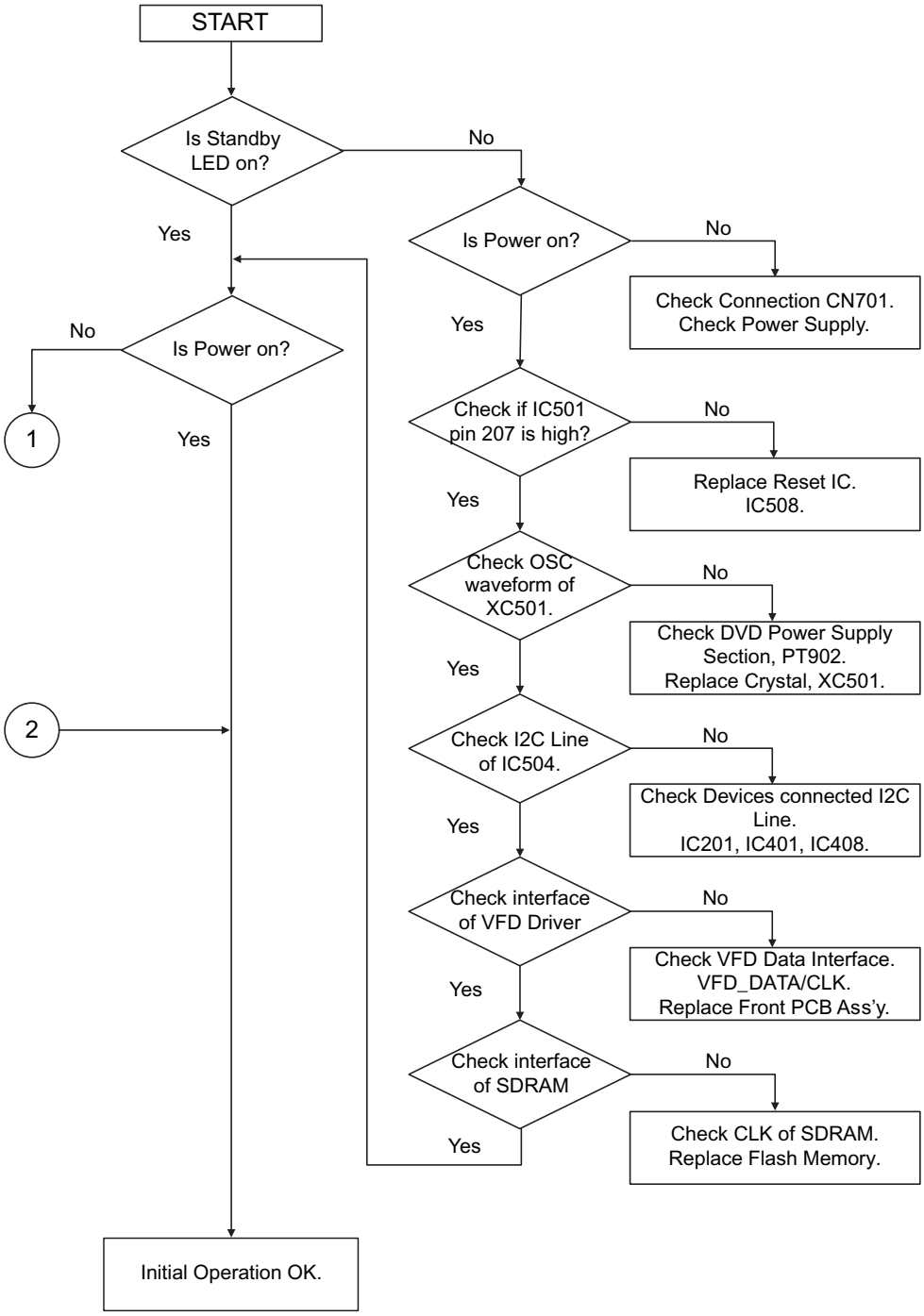
1. BASIC OPERATING



6. Trouble Shooting Guide

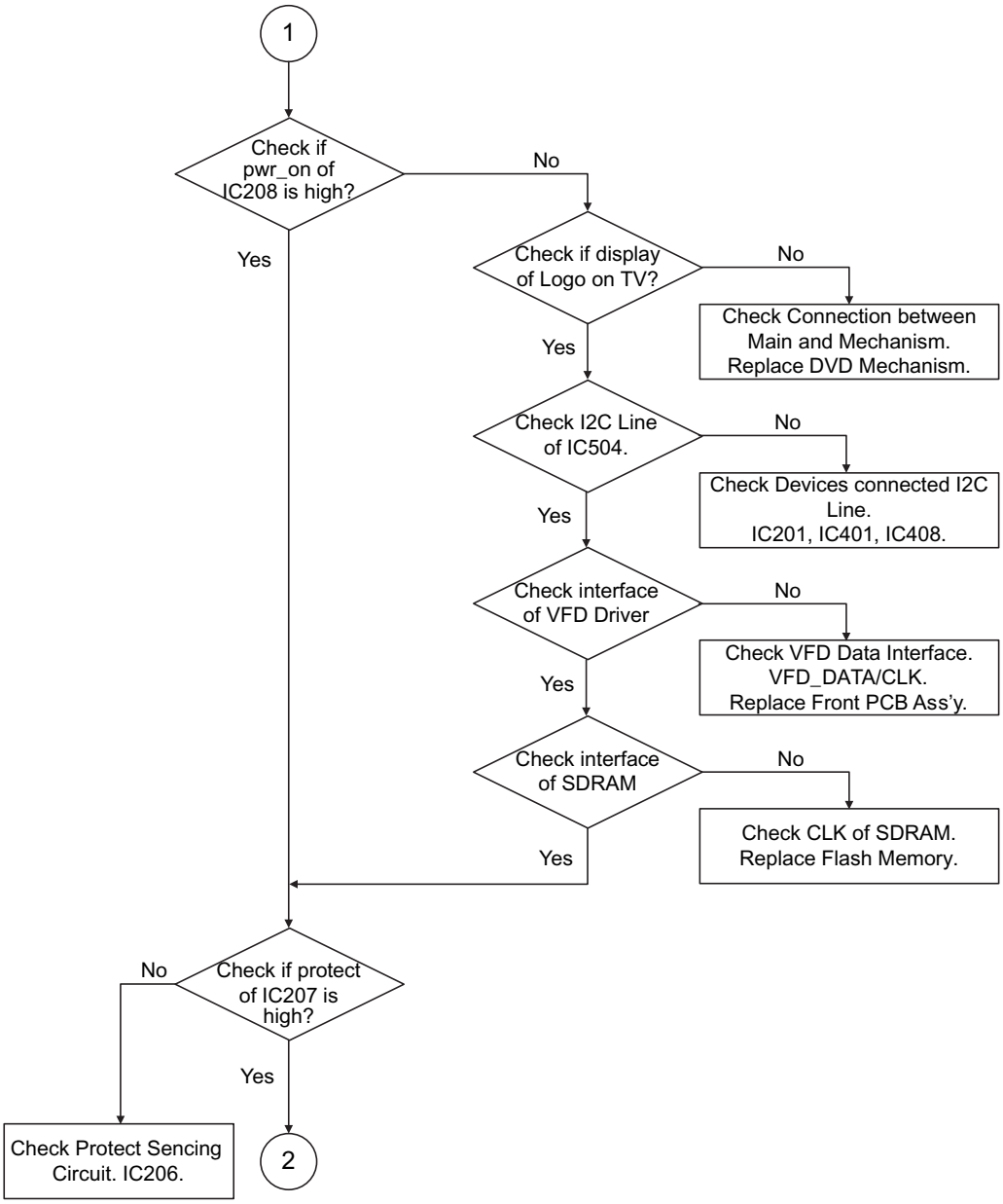
• Front Circuit

1. INITIAL OPERATING



6. Trouble Shooting Guide

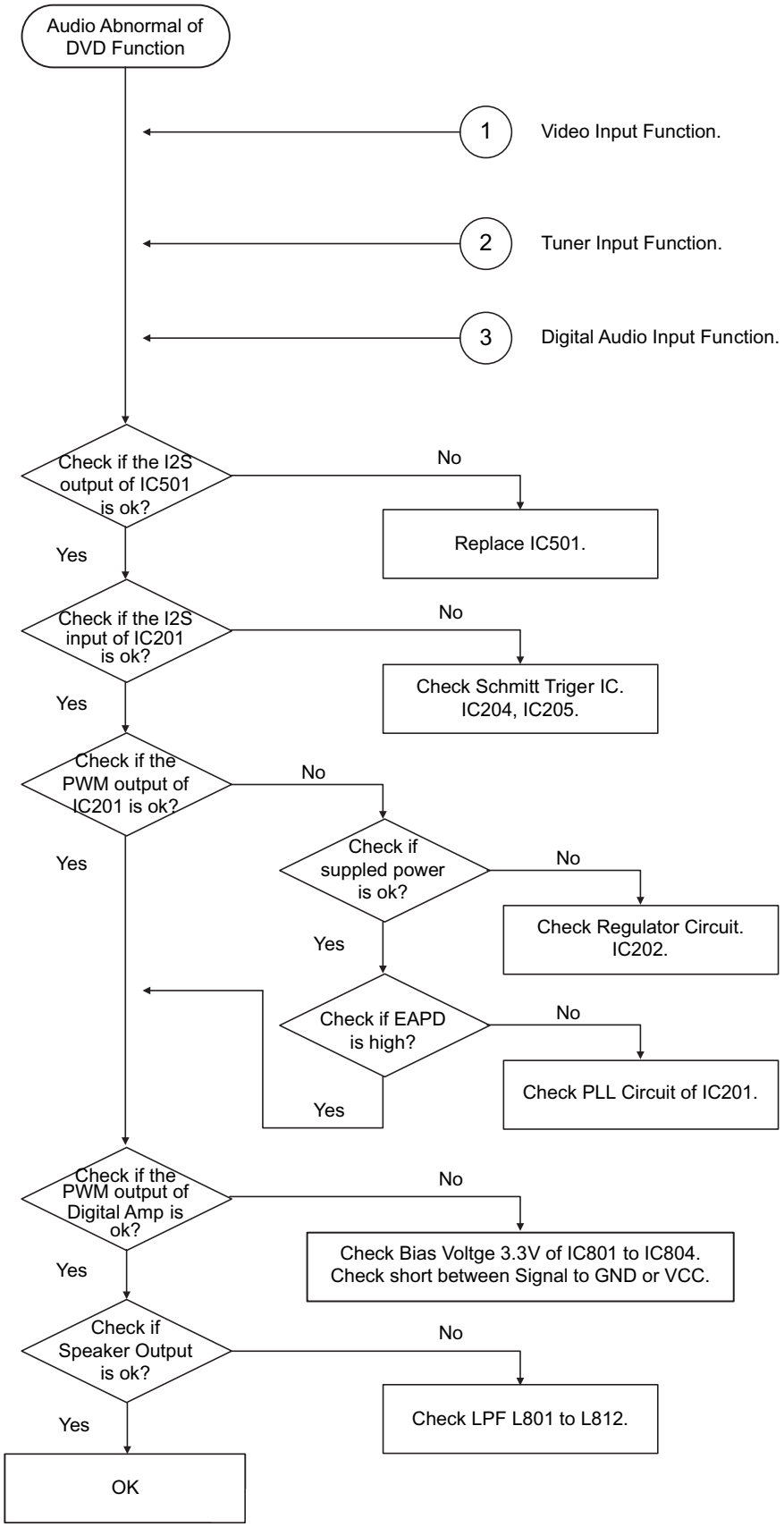
• Front Circuit



6. Trouble Shooting Guide

• Audio Part

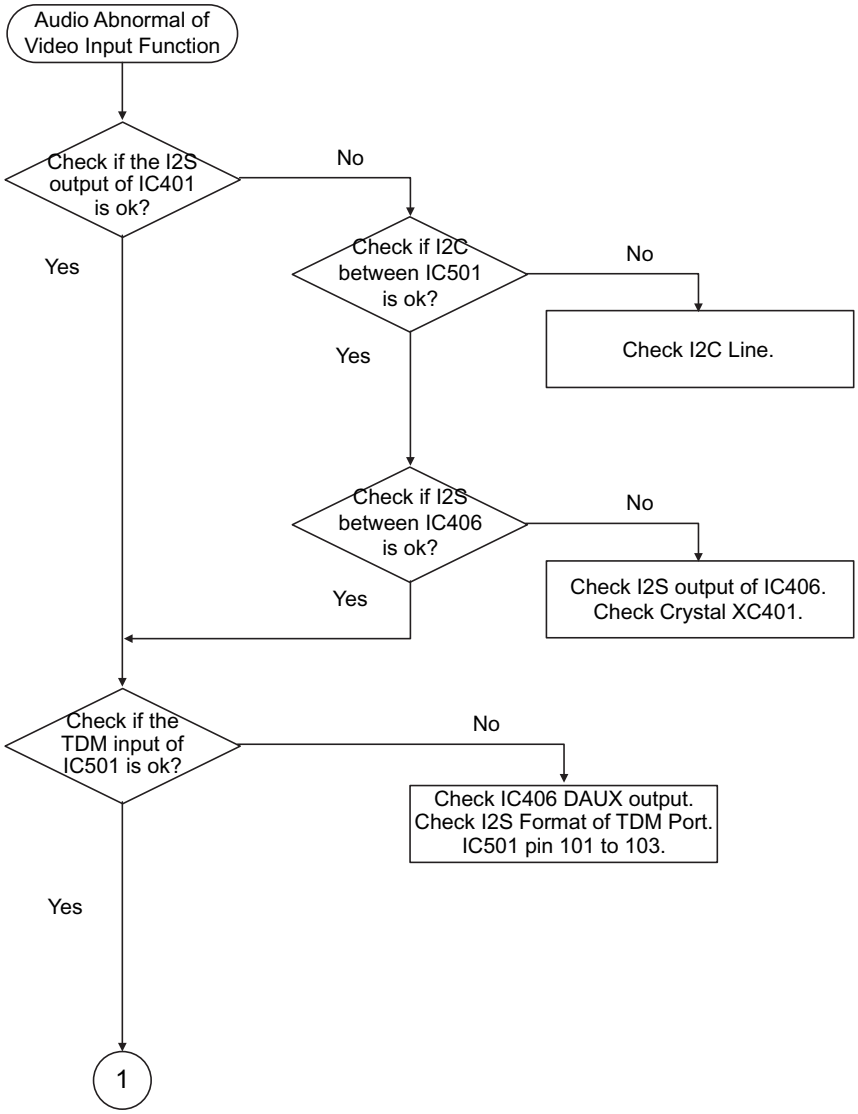
3. AUDIO Abnormal



6. Trouble Shooting Guide

● Audio Part

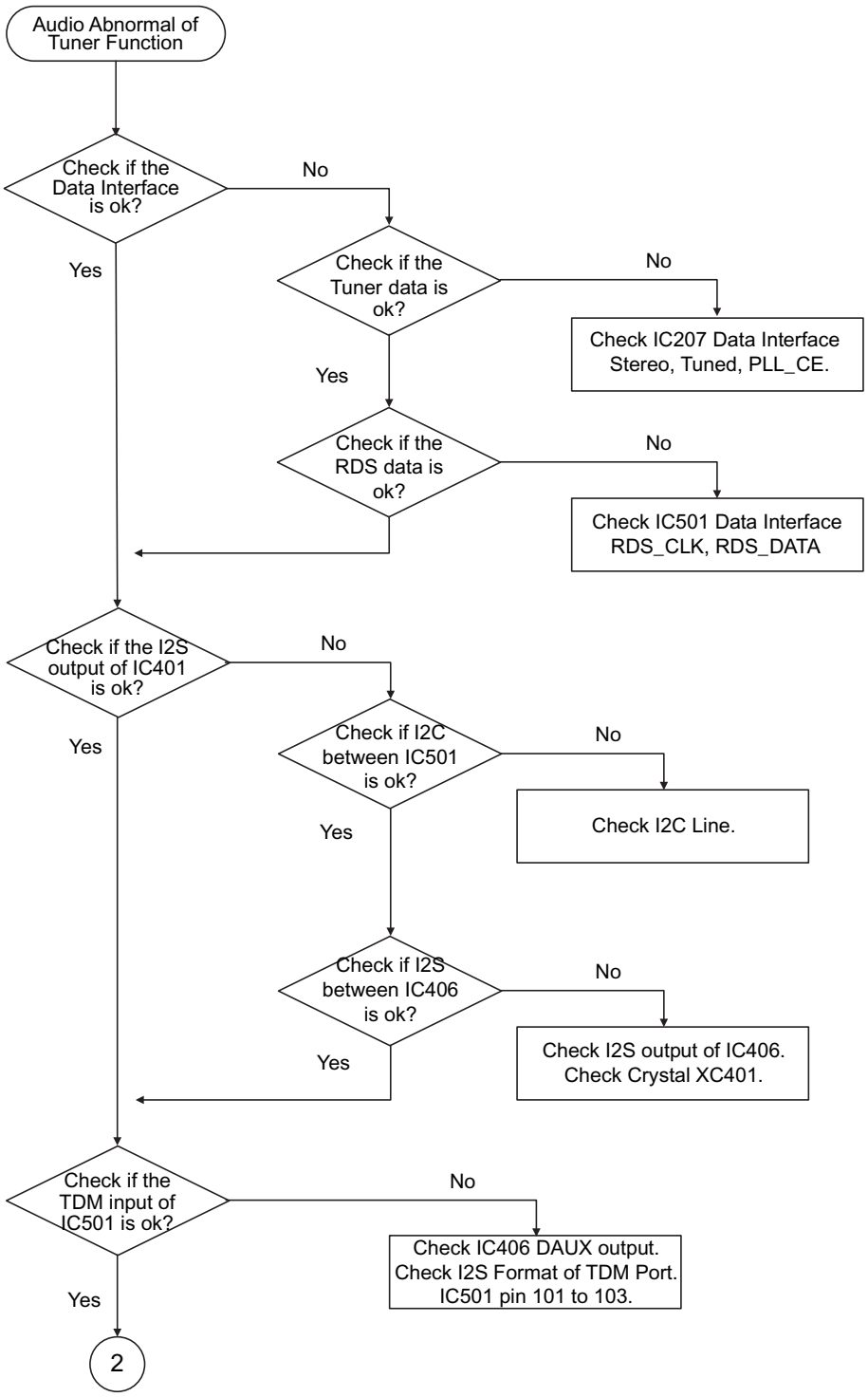
3. AUDIO Abnormal


Audio Abnormal of Video Input Function
Check if the I2S output of IC401 is ok?
No
Yes
Check if I2C between IC501 is ok?
No
Check I2C Line.
Yes
Check if I2S between IC406 is ok?
No
Check I2S output of IC406. Check Crystal XC401.
Yes
Check if the TDM input of IC501 is ok?
No
Check IC406 DAUX output. Check I2S Format of TDM Port. IC501 pin 101 to 103.
Yes
1

6. Trouble Shooting Guide

• Audio Part

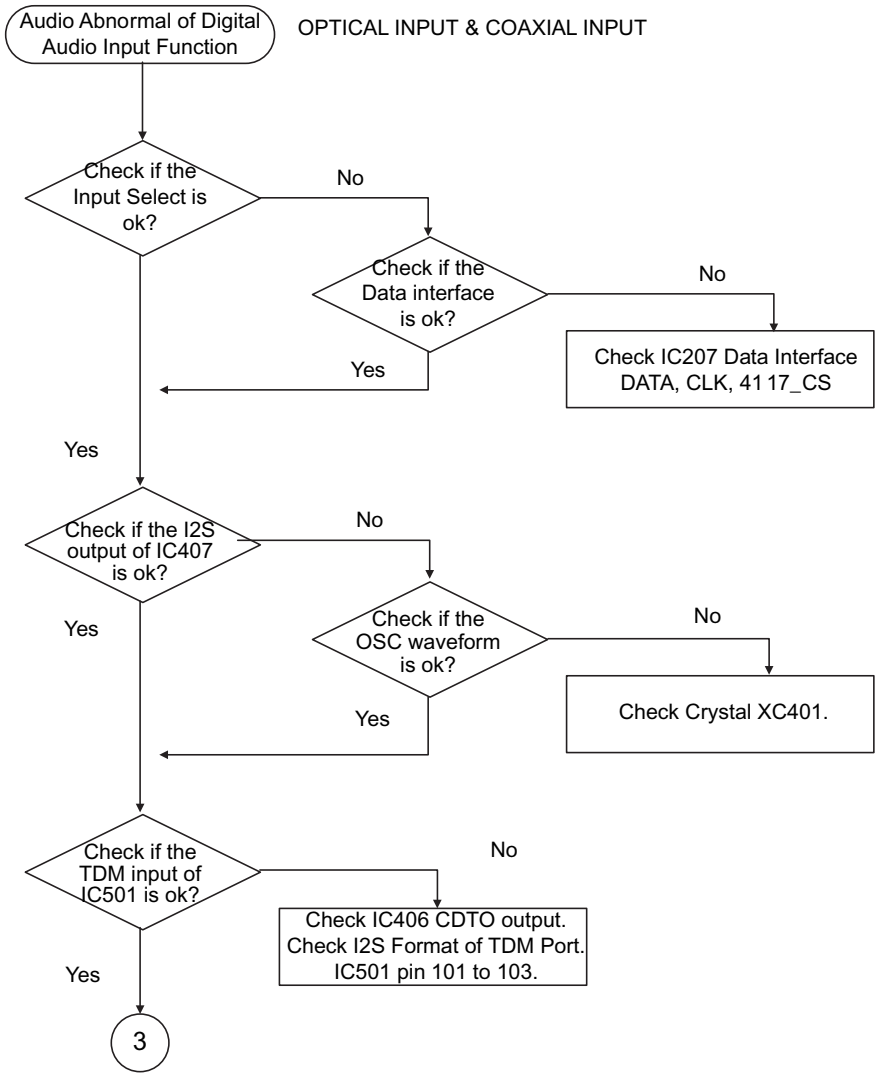
3. AUDIO Abnormal


Audio Abnormal of Tuner Function
Check if the Data Interface is ok?
No
Yes
Check if the Tuner data is ok?
No
Check IC207 Data Interface Stereo, Tuned, PLL_CE.
Yes
Check if the RDS data is ok?
No
Check IC501 Data Interface RDS_CLK, RDS_DATA
Check if the I2S output of IC401 is ok?
No
Yes
Check if I2C between IC501 is ok?
No
Check I2C Line.
Yes
Check if I2S between IC406 is ok?
No
Check I2S output of IC406. Check Crystal XC401.
Yes
Check if the TDM input of IC501 is ok?
No
Check IC406 DAUX output. Check I2S Format of TDM Port. IC501 pin 101 to 103.
Yes
2

6. Trouble Shooting Guide

● Audio Part

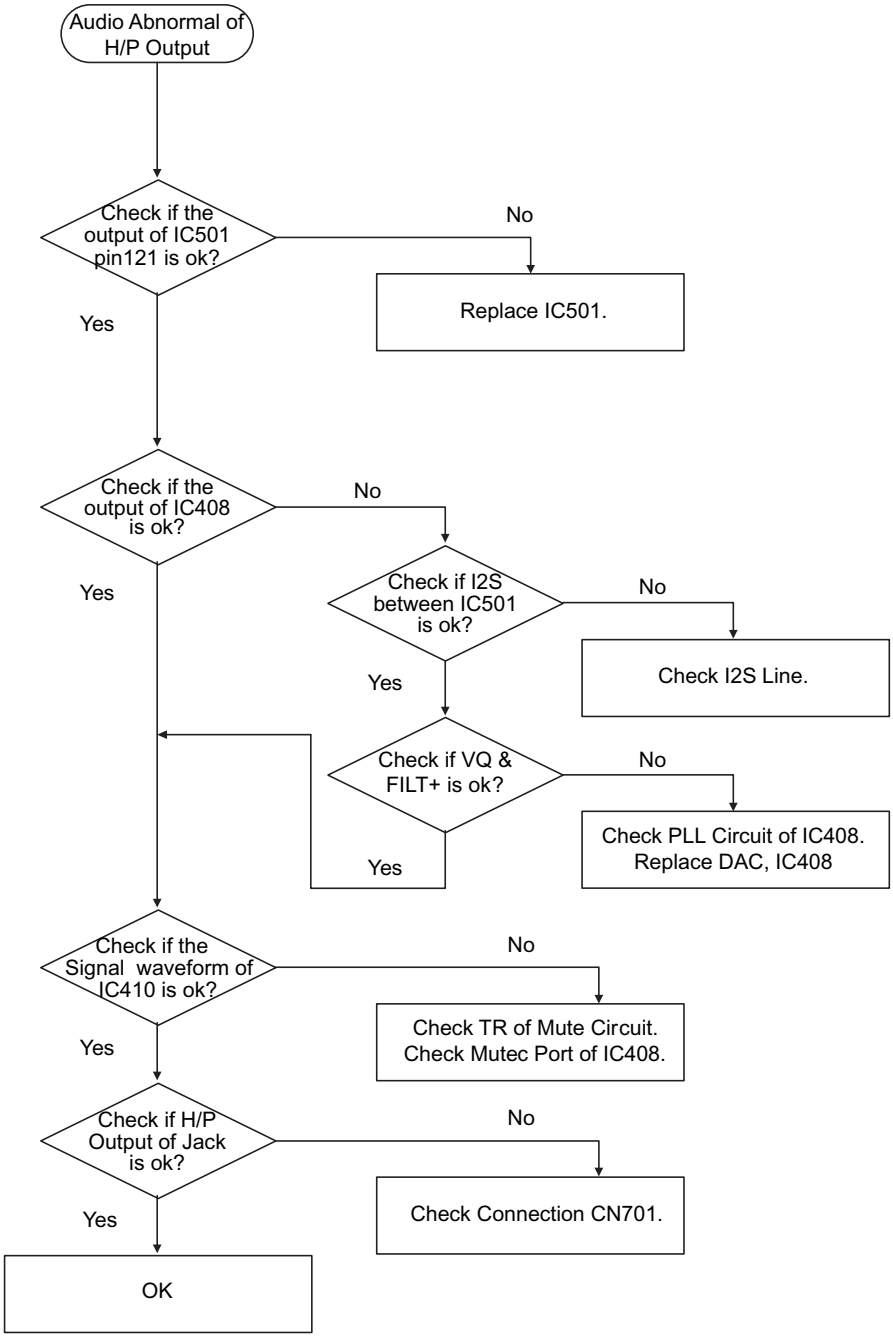
3. AUDIO Abnormal


Audio Abnormal of Digital Audio Input Function
OPTICAL INPUT & COAXIAL INPUT
Check if the Input Select is ok?
No
Check if the Data interface is ok?
No
Check IC207 Data Interface DATA, CLK, 41 17_CS
Yes
Yes
Check if the I2S output of IC407 is ok?
No
Check if the OSC waveform is ok?
No
Check Crystal XC401.
Yes
Yes
Check if the TDM input of IC501 is ok?
No
Check IC406 CDTO output. Check I2S Format of TDM Port. IC501 pin 101 to 103.
Yes
3

6. Trouble Shooting Guide

• Audio Part

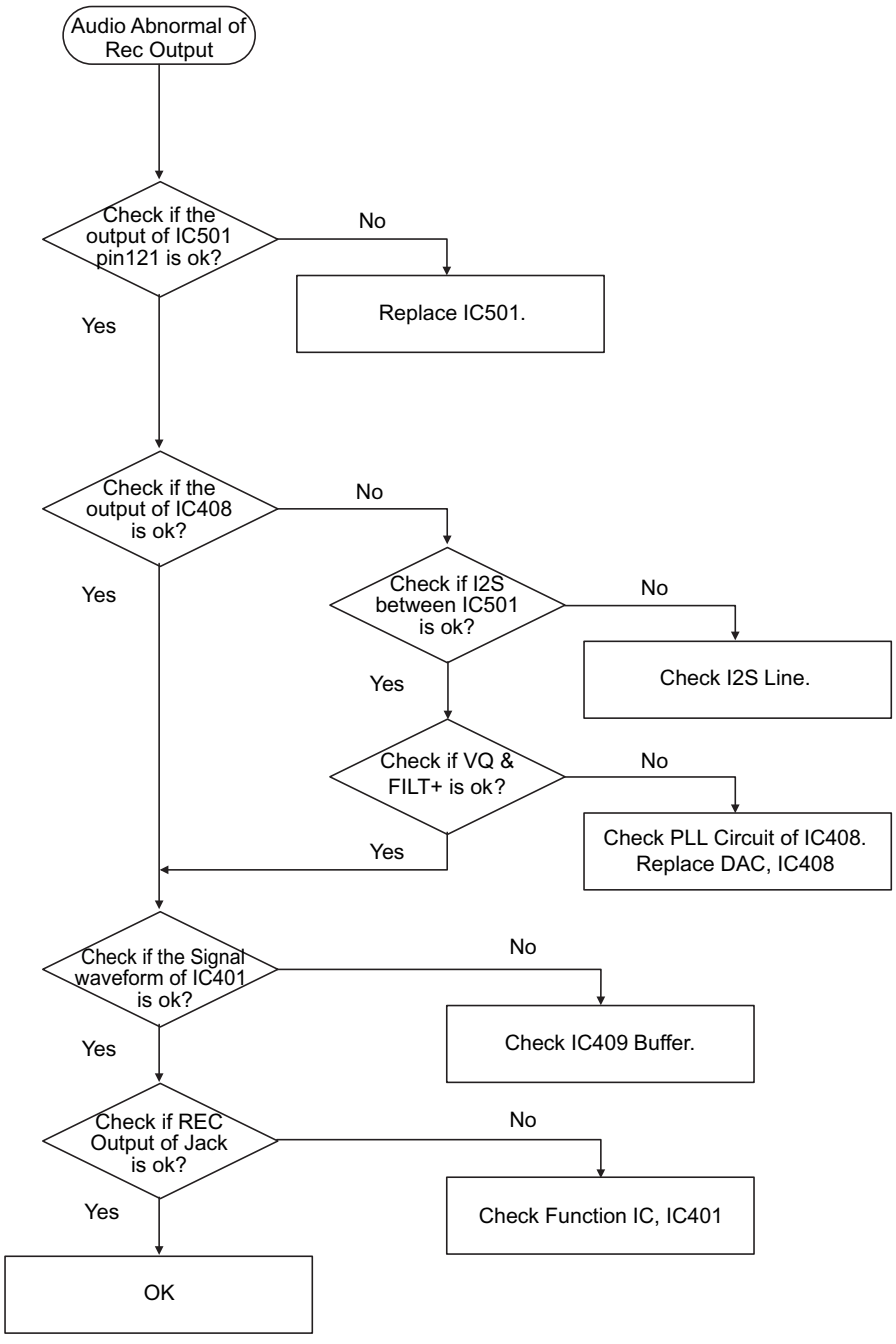
4. AUDIO LINE OUTPUT Abnormal



6. Trouble Shooting Guide

• Audio Part

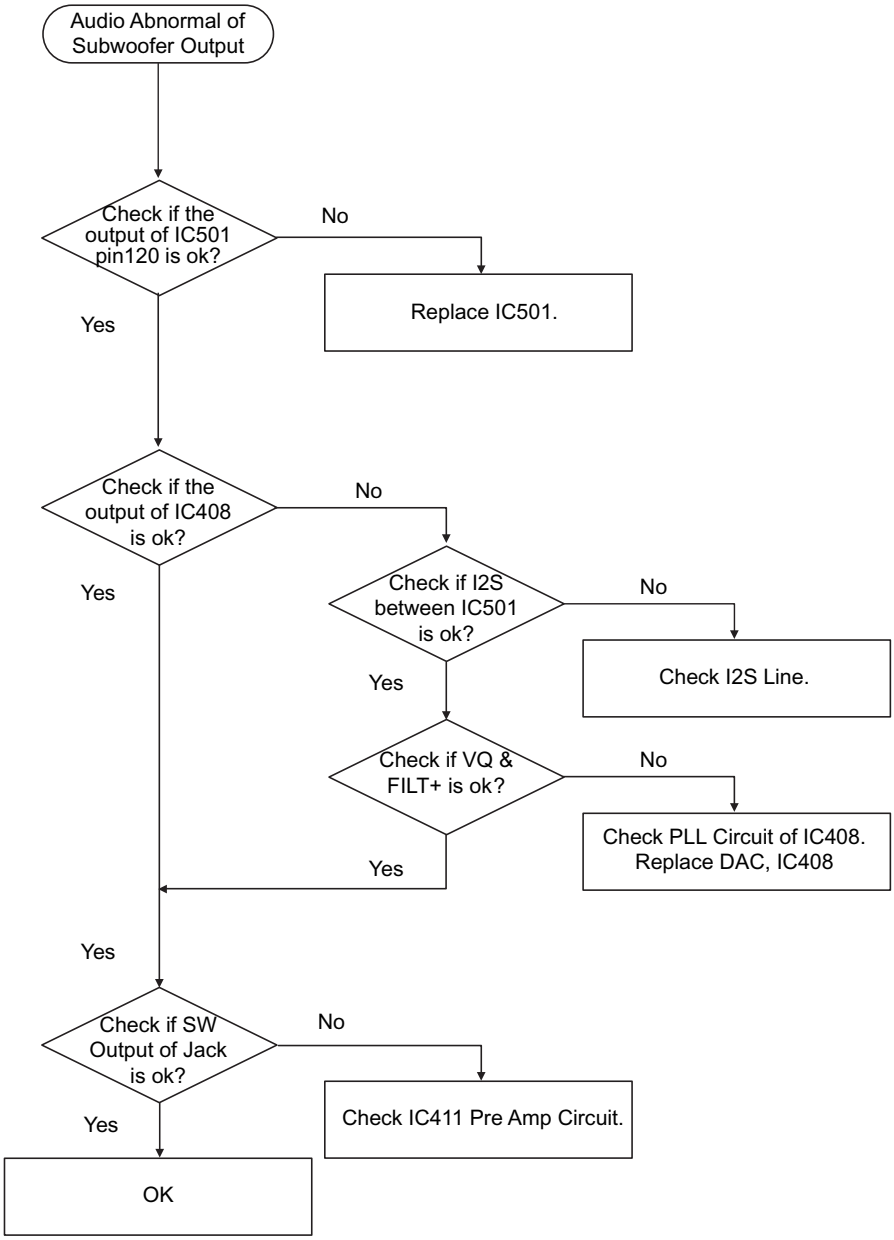
4. AUDIO LINE OUTPUT Abnormal



6. Trouble Shooting Guide

• Audio Part

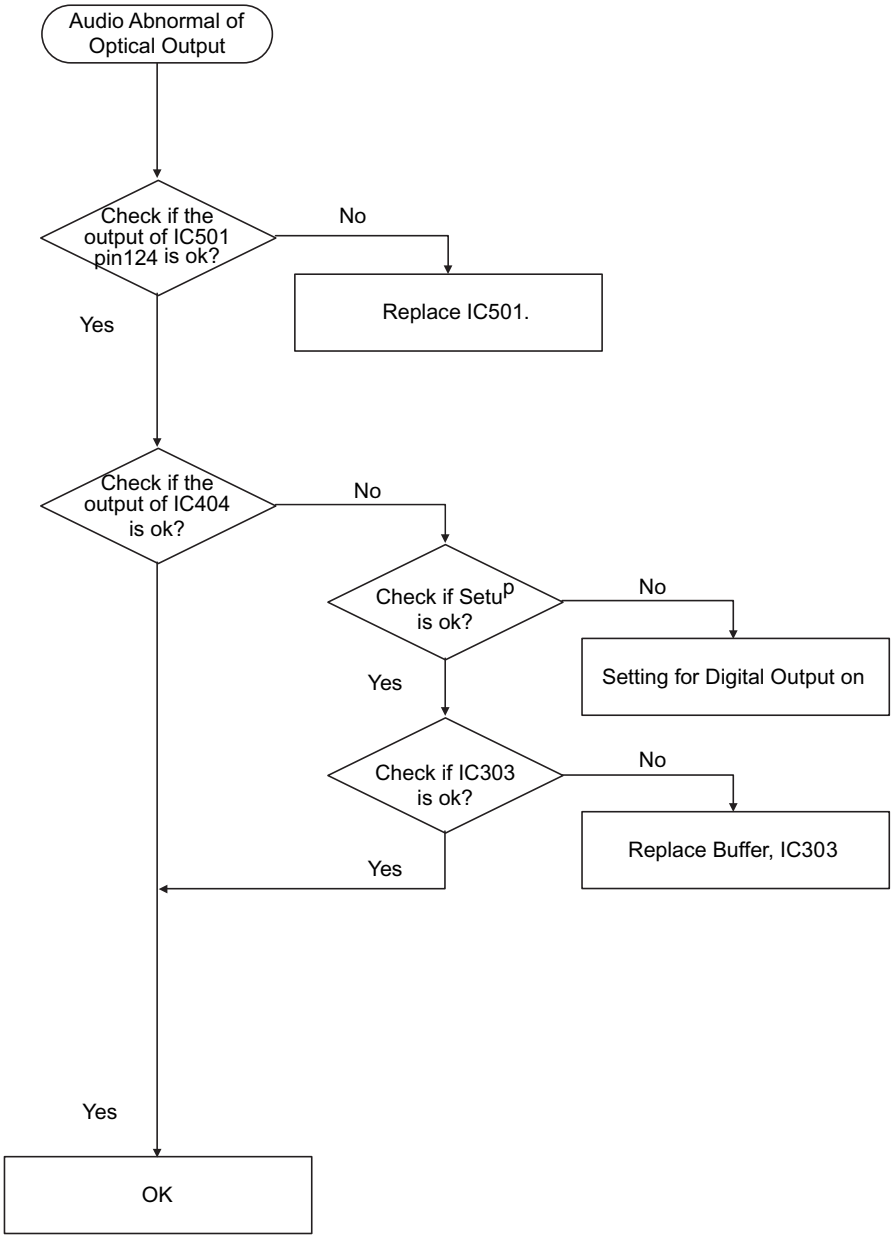
4. AUDIO LINE OUTPUT Abnormal



6. Trouble Shooting Guide

● Audio Part

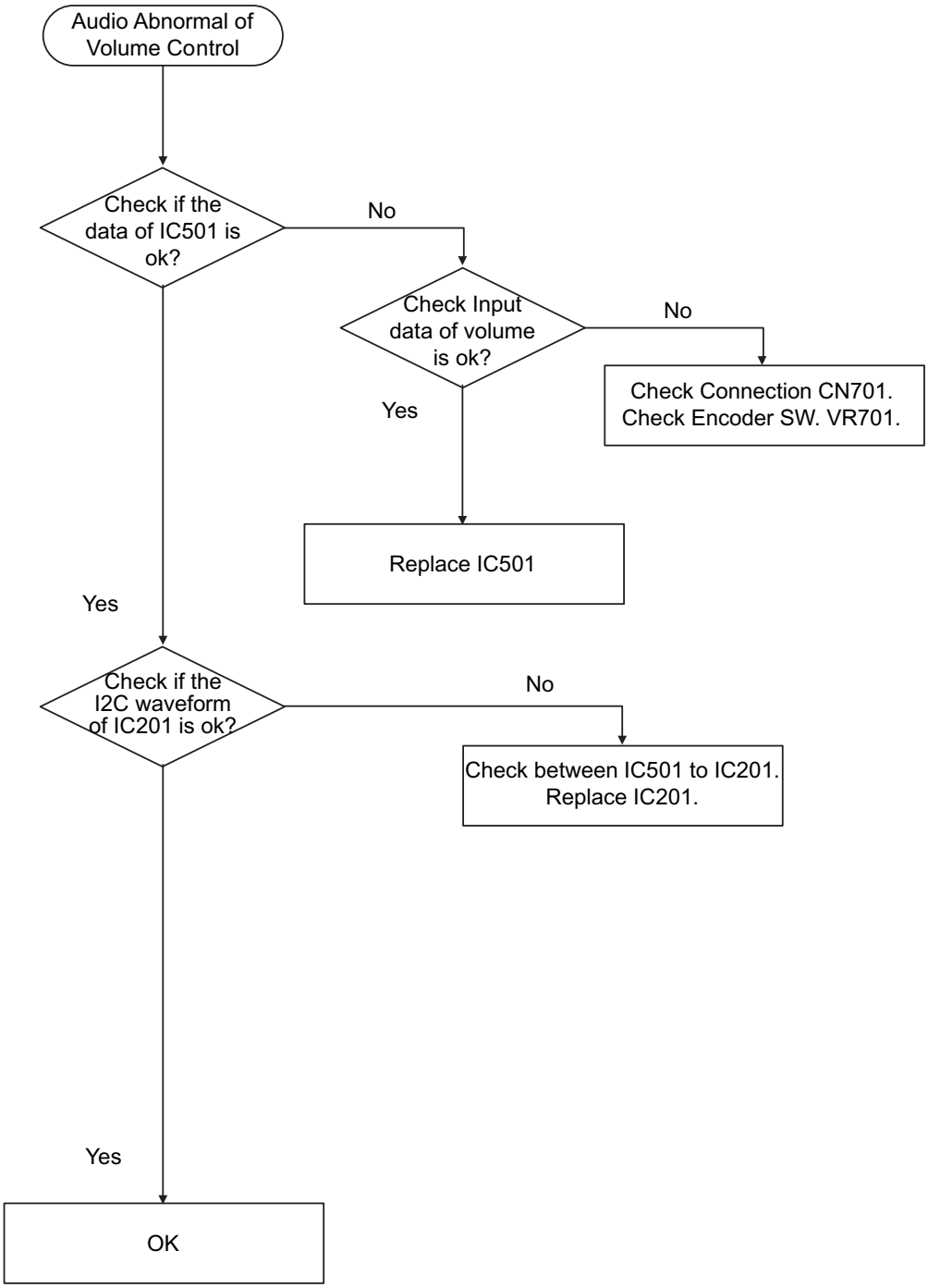
4. AUDIO LINE OUTPUT Abnormal



6. Trouble Shooting Guide

• Audio Part

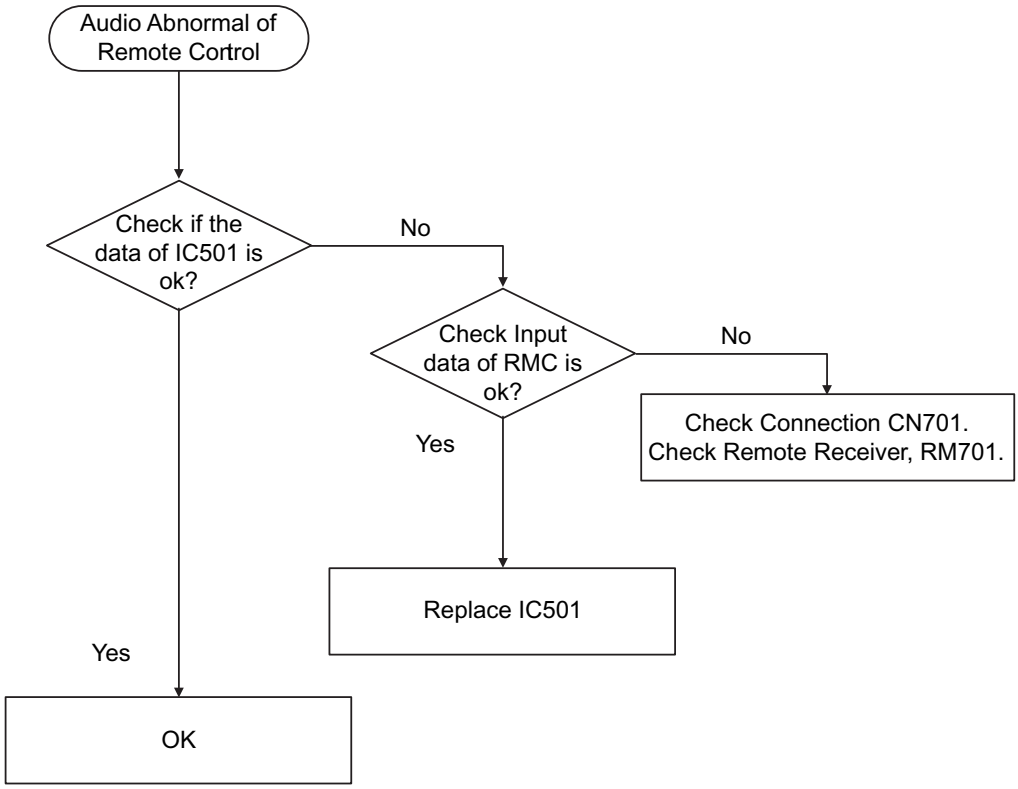
5. AUDIO CONTROL Abnormal



6. Trouble Shooting Guide

• Audio Part

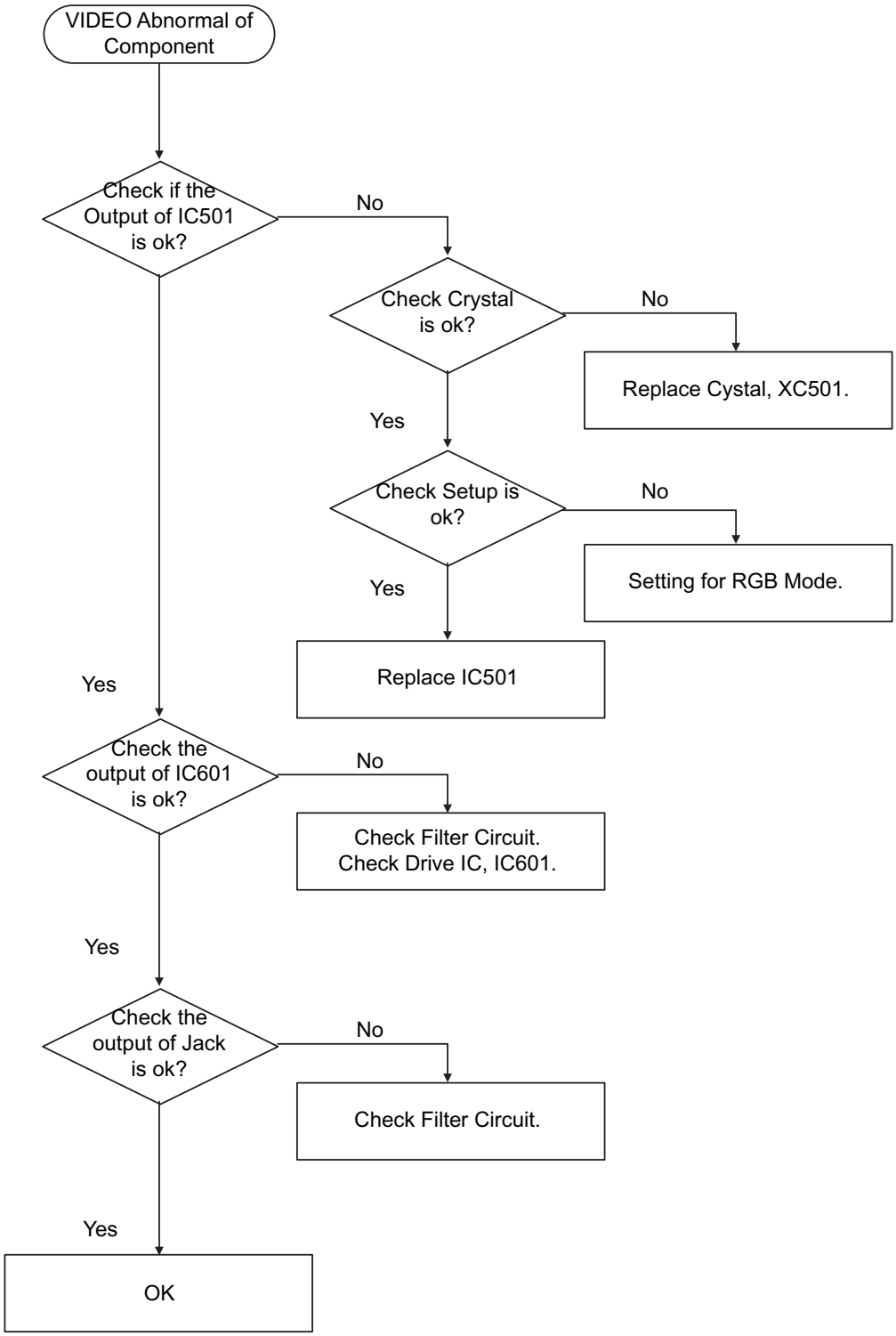
5. AUDIO CONTROL Abnormal



6. Trouble Shooting Guide

• Audio Part

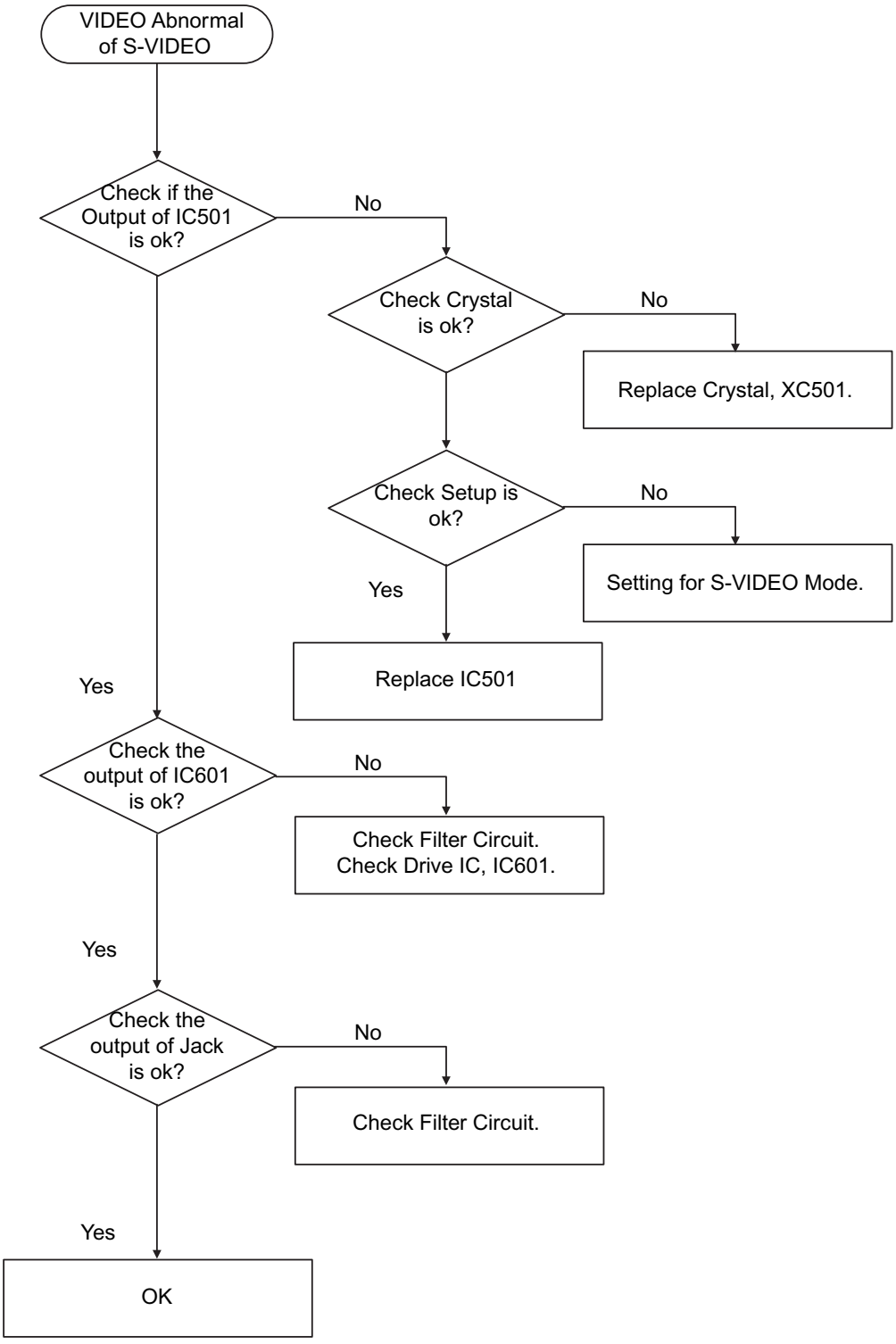
6. VIDEO OUTPUT Abnormal



6. Trouble Shooting Guide

• Audio Part

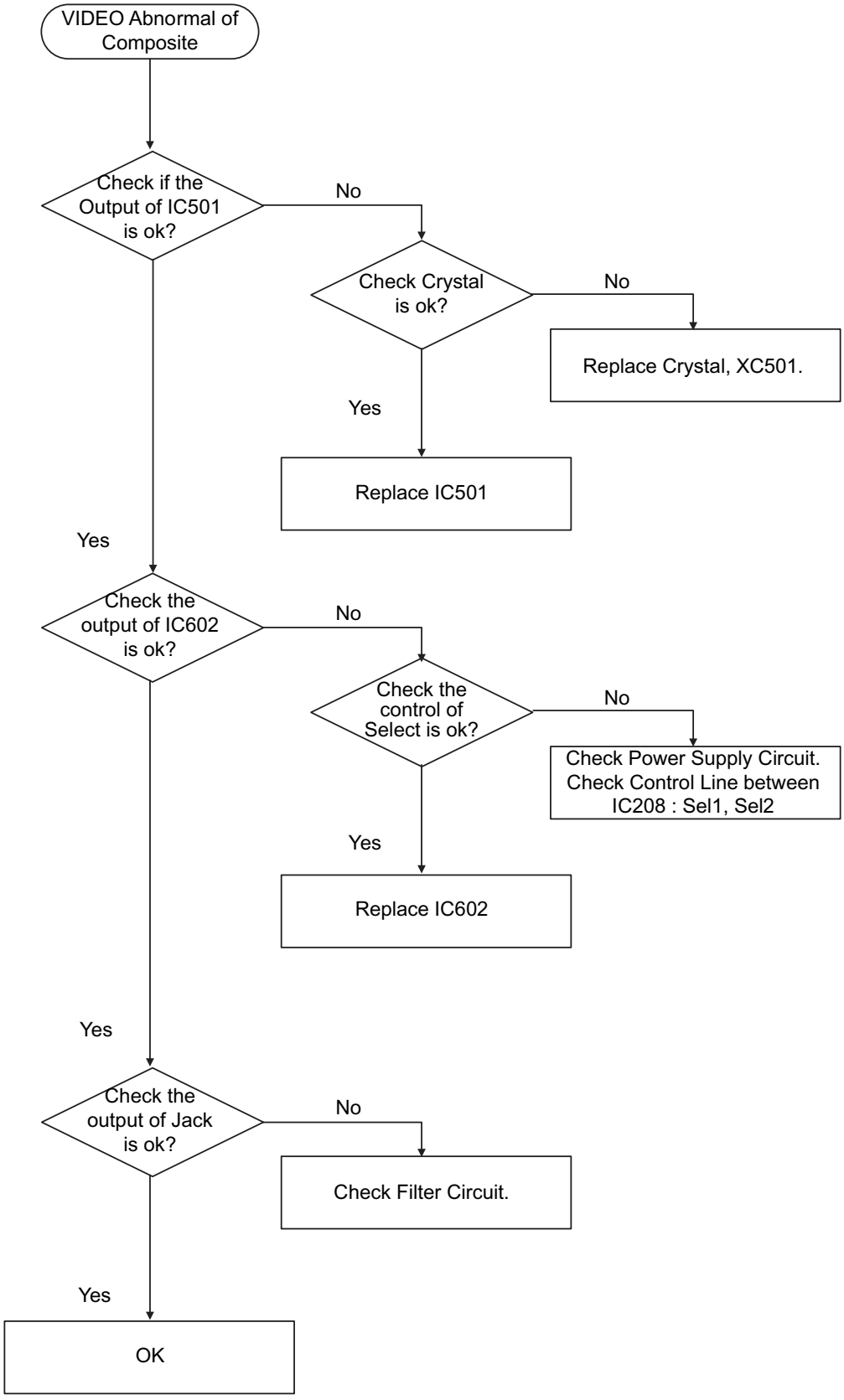
6. VIDEO OUTPUT Abnormal



6. Trouble Shooting Guide

• Audio Part

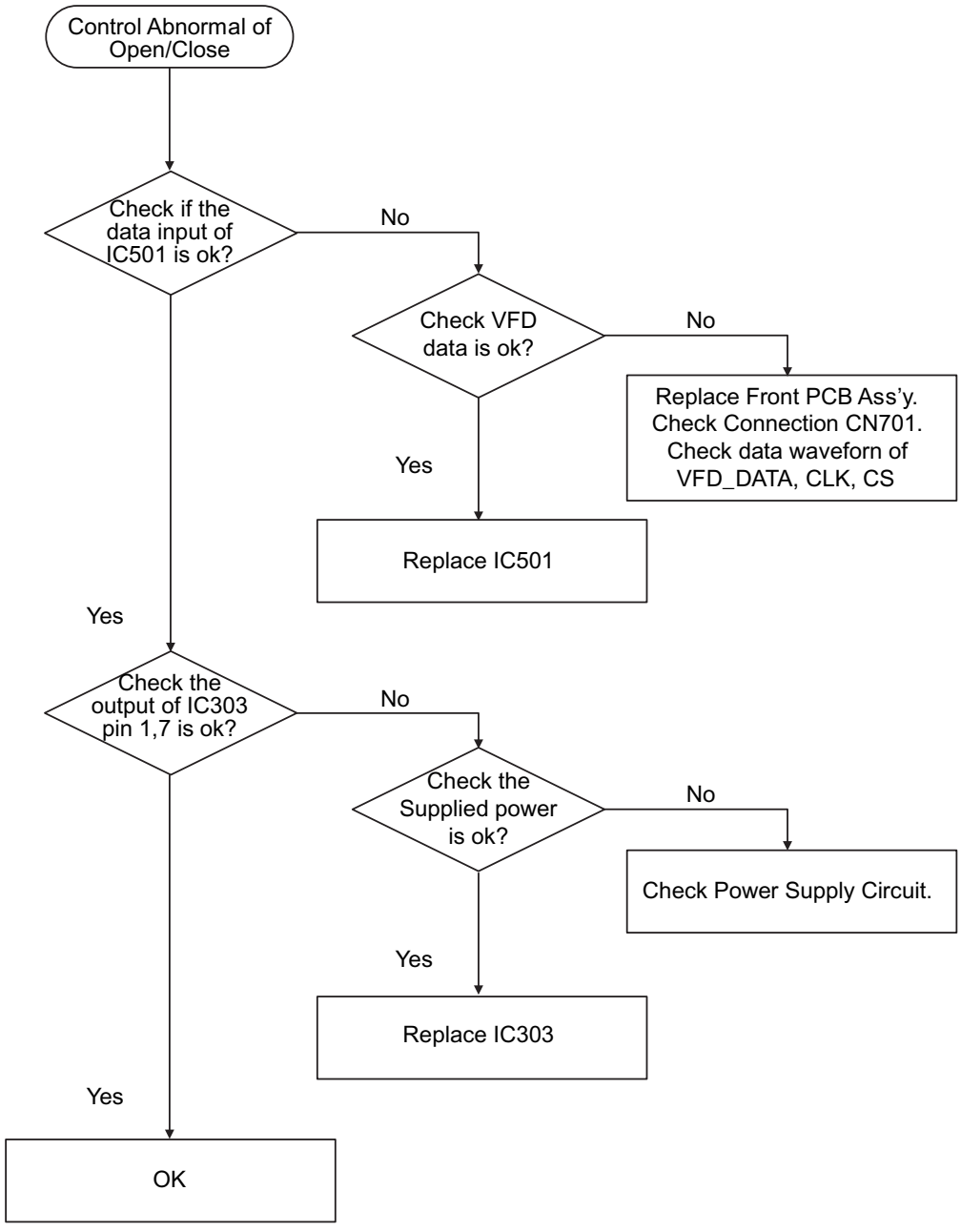
6. VIDEO OUTPUT Abnormal



6. Trouble Shooting Guide

• Audio Part

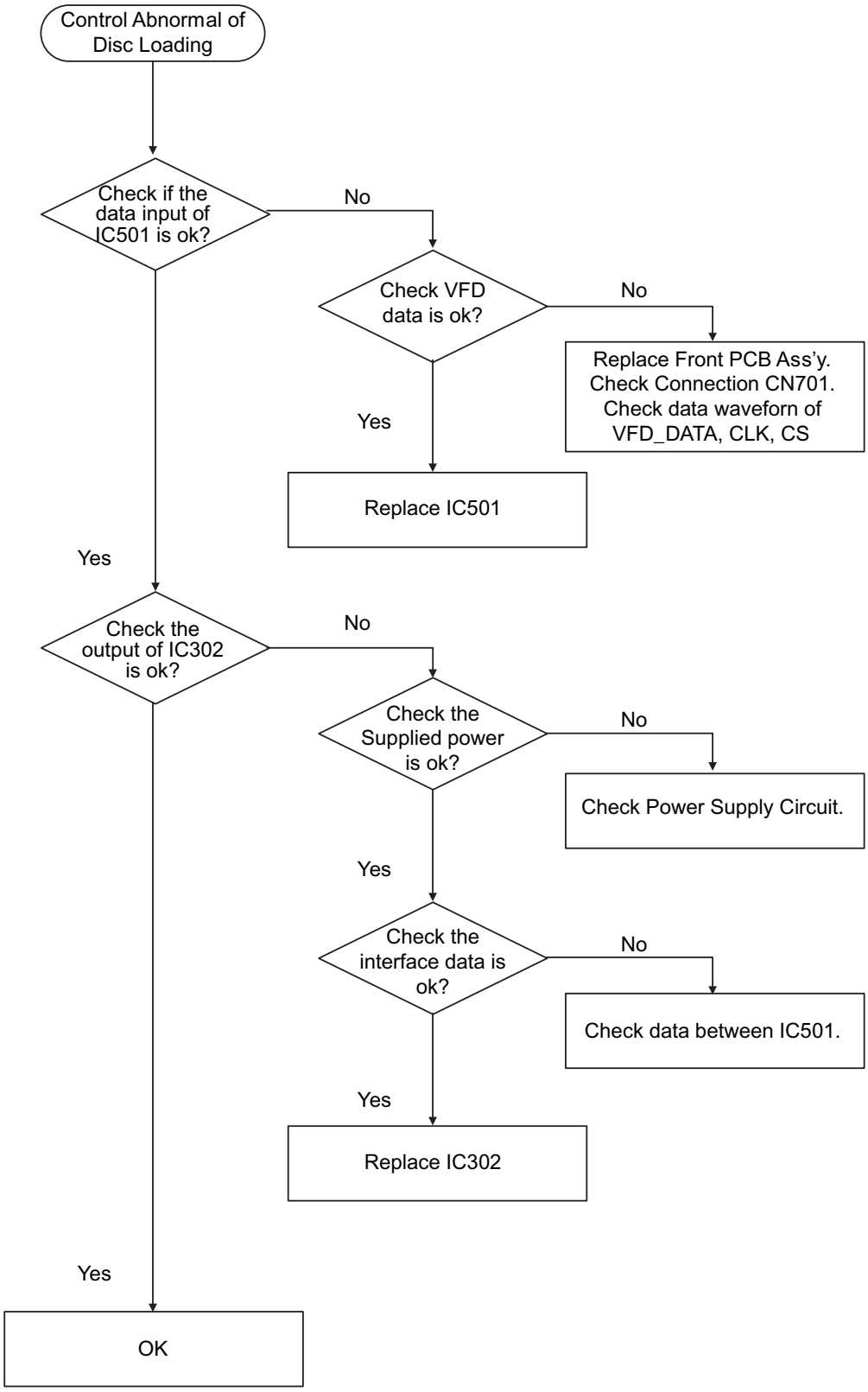
7. MECHA CONTROL Abnormal



6. Trouble Shooting Guide

• Audio Part

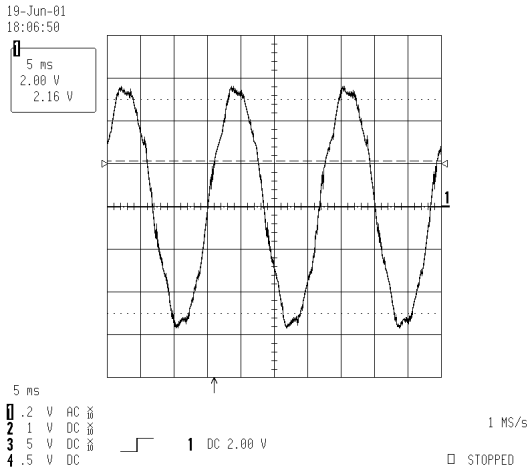
7. MECHA CONTROL Abnormal



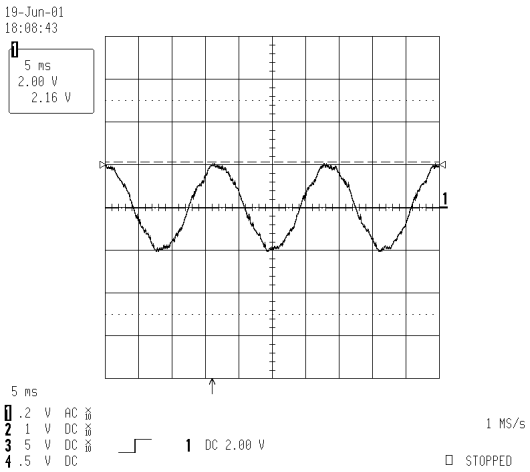
7. Waveforms of Major Check Method

※ Test Point : DVD Test Disc " MDVD-W111 TRACK2 Color Bar"

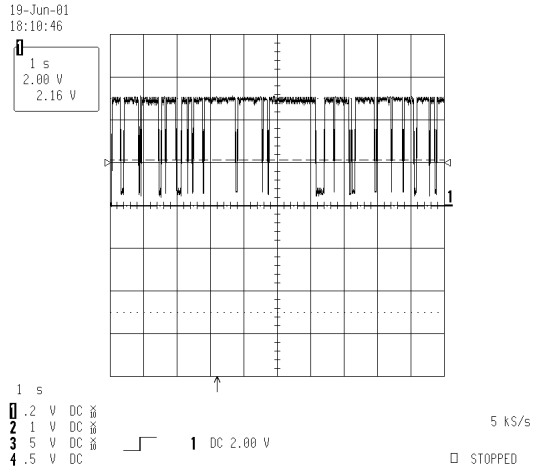
● Audio Out Signal Waveform



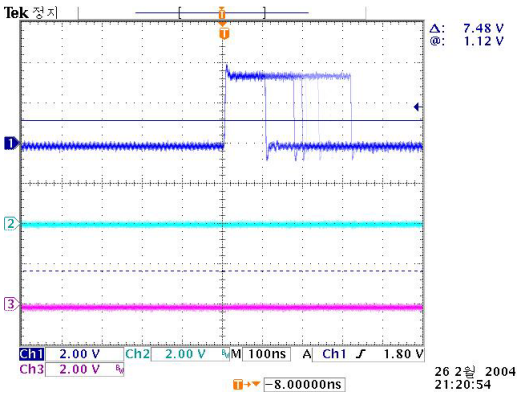
● DAC Output Signal Waveform



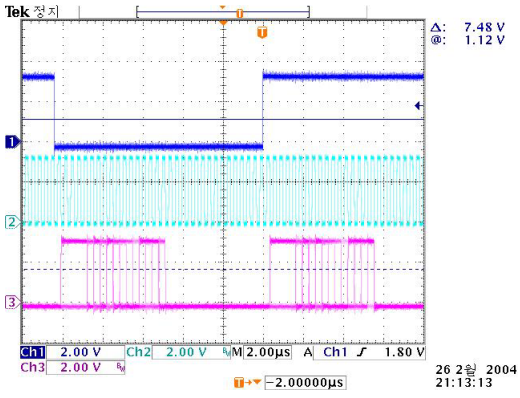
● Optical Output Audio Data Signal waveform



● PWM Output Waveform During Normal Play



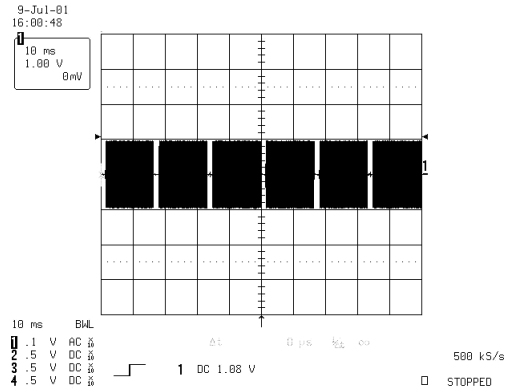
● Serial Data Output Waveform During Normal Play

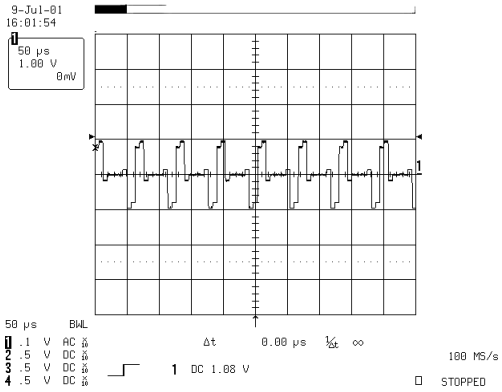


7. Waveforms of Major Check Method

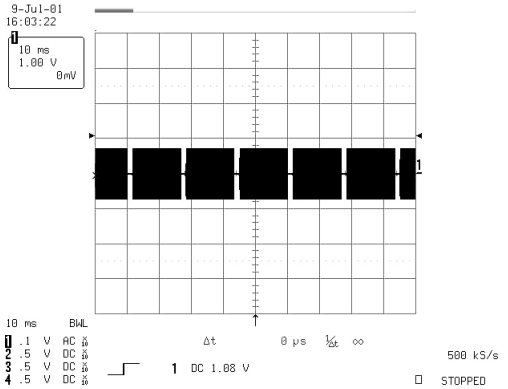
※ Test Point : DVD Test Disc " MDVD-W111 TRACK2 Color Bar"

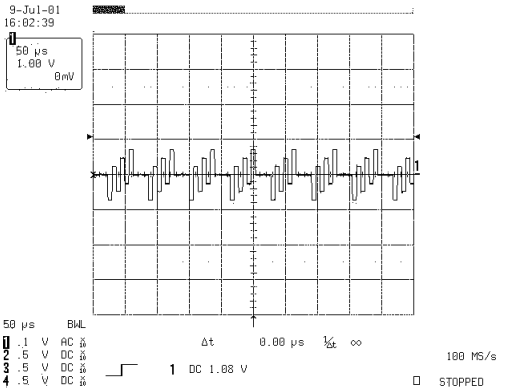
● Pr Output Data Waveform in Component Output



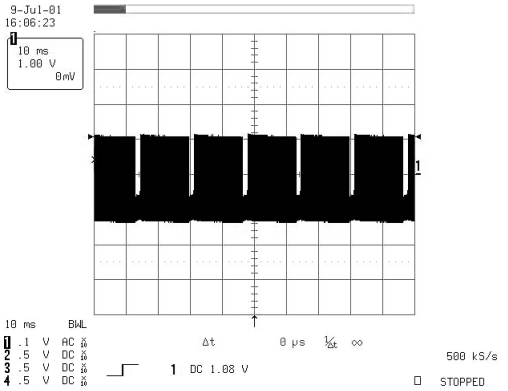


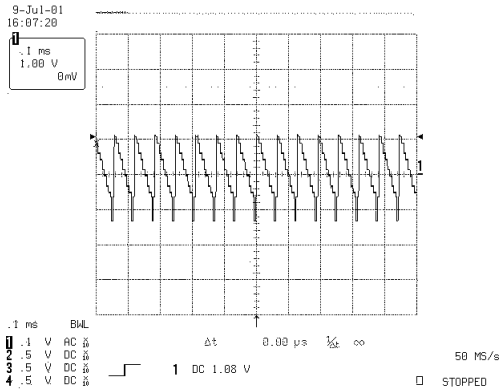
● Pb Output Data Waveform in Component Output





● Y Output Data Waveform in Component Output

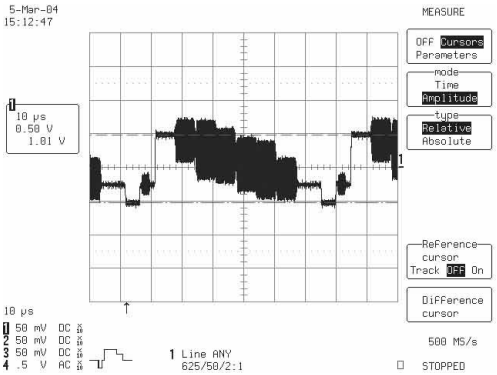




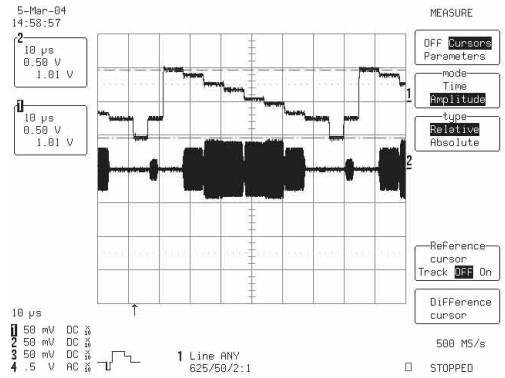
7. Waveforms of Major Check Method

※ Test Point : DVD Test Disc " MDVD-W111 TRACK2 Color Bar"

● Composite Output Data Waveform in Monitor Output

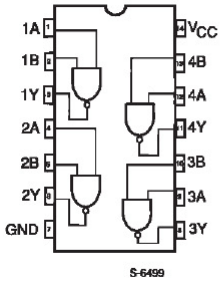


● S-Video Output Data Waveform

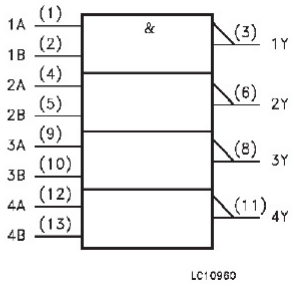


8. Internal Block Diagram of ICs

● 74HC00

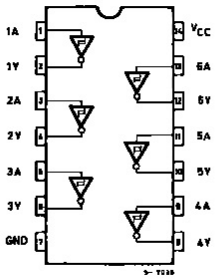


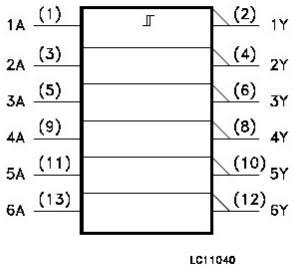
S-6499



LC1096D

● 74HC14



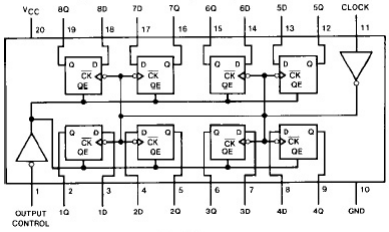


LC11040

● 74HC374

Connection Diagram

Pin Assignments for DIP, SOIC, SOP and TSSOP



Top View

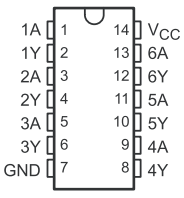
Truth Table

Output Control	Clock	Data	Output
L	↑	H	H
L	↑	L	L
L	L	X	Q_0
H	X	X	Z

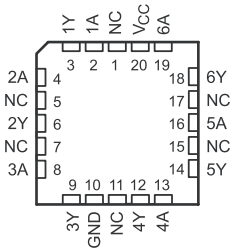
H = HIGH Level
L = LOW Level
X = Don't Care
↑ = Transition from LOW-to-HIGH
Z = High Impedance State
Q_0 = The level of the output before steady state input conditions were established

● 74HCU04

SN54HCU04 . . . J OR W PACKAGE
SN74HCU04 . . . D, DB, N, NS, OR PW PACKAGE
(TOP VIEW)

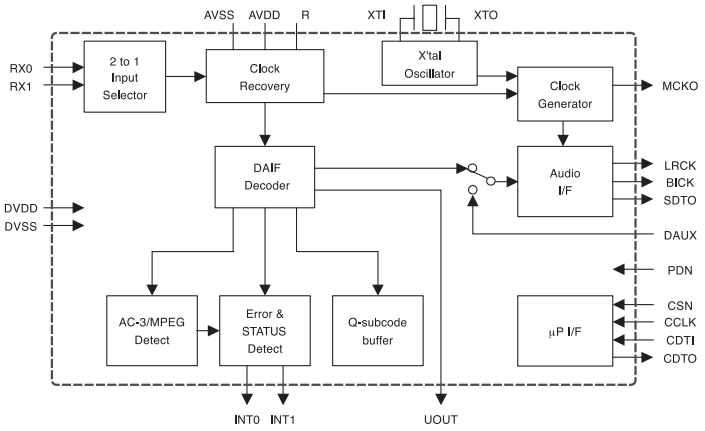


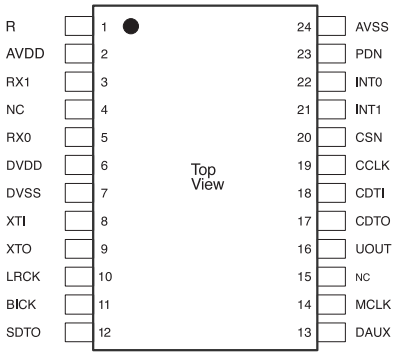
SN54HCU04 . . . FK PACKAGE
(TOP VIEW)



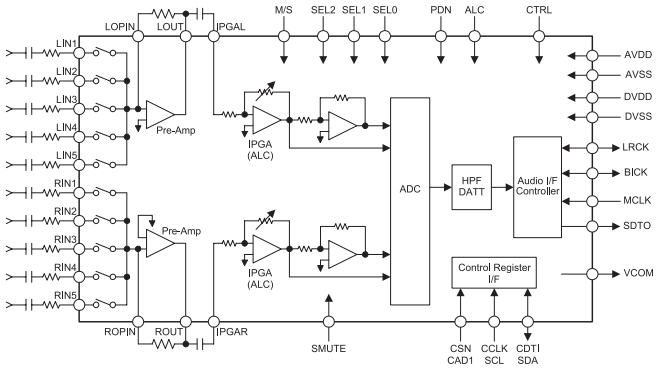
8. Internal Block Diagram of ICs

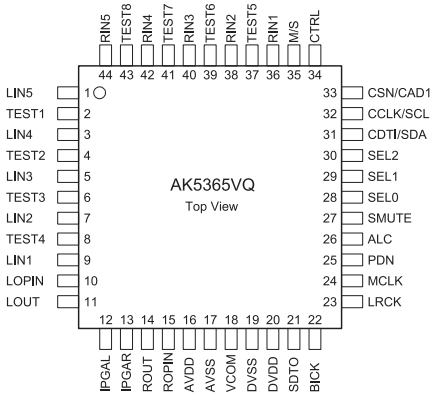
● AK4117



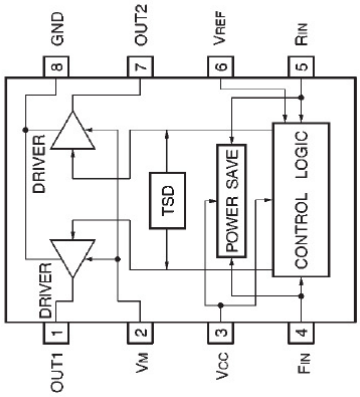


● AK5365

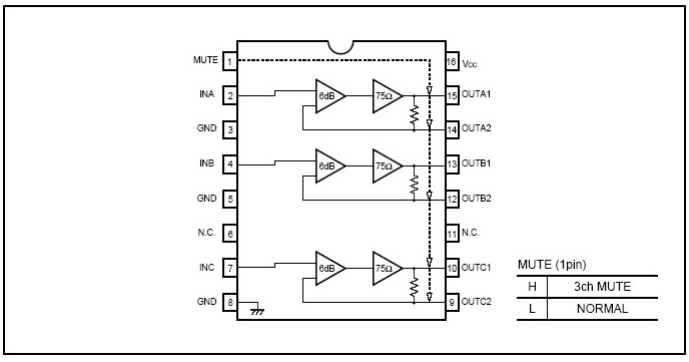




● BA6287F

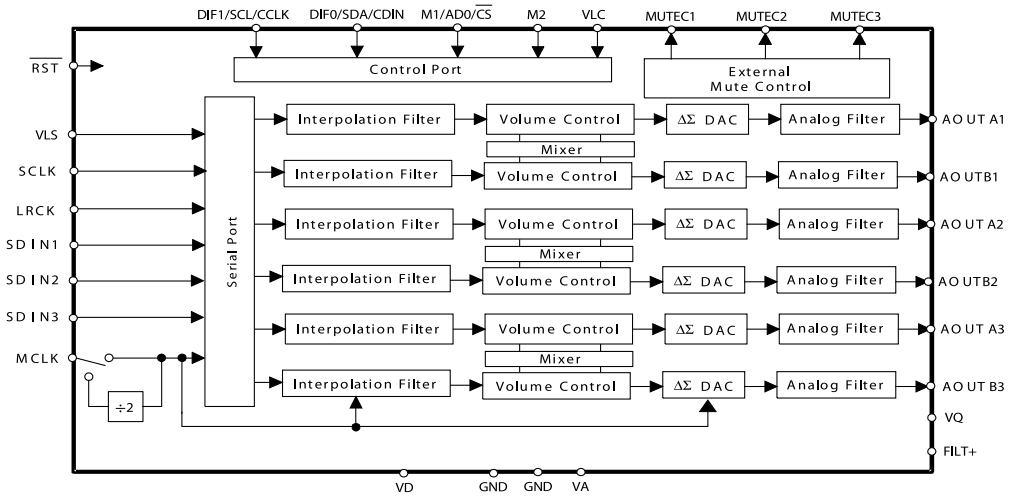


● BA7660FS

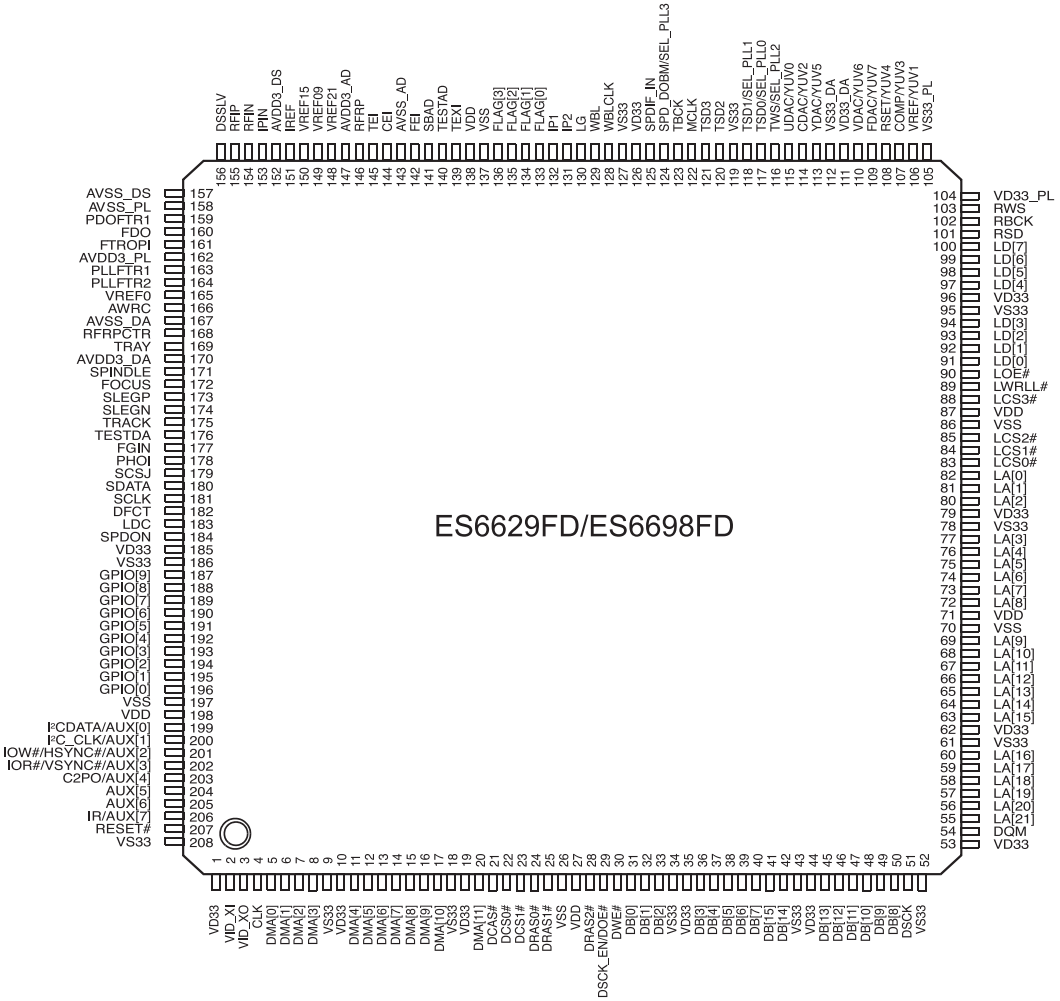


8. Internal Block Diagram of ICs

● CS4360

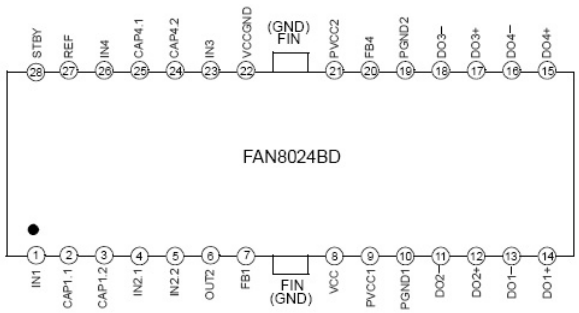


● ES6629FD/ES6698FD

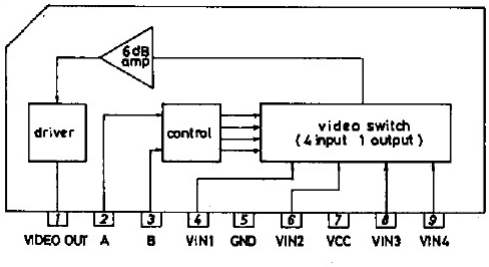


8. Internal Block Diagram of ICs

● FAN8024DB

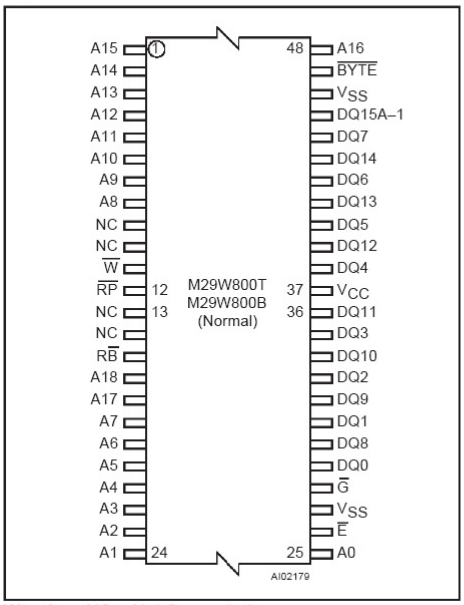


● LA7952



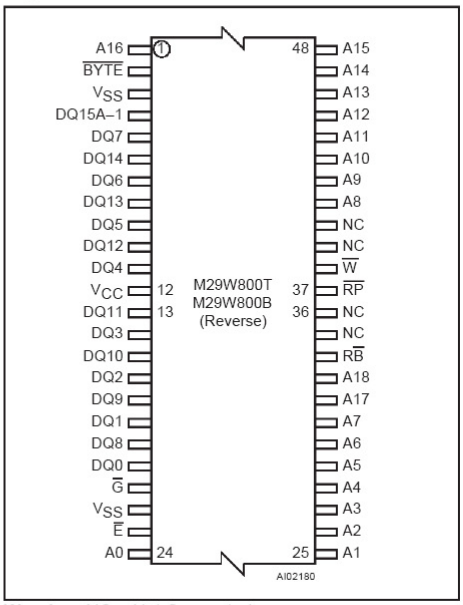
● M29W800DB

Figure 2A. TSOP Pin Connections



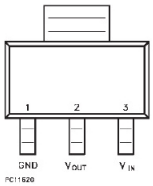
Warning: NC = Not Connected.

Figure 2B. TSOP Reverse Pin Connections

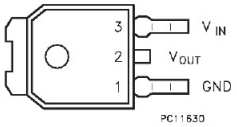


Warning: NC = Not Connected.

● LD1117A



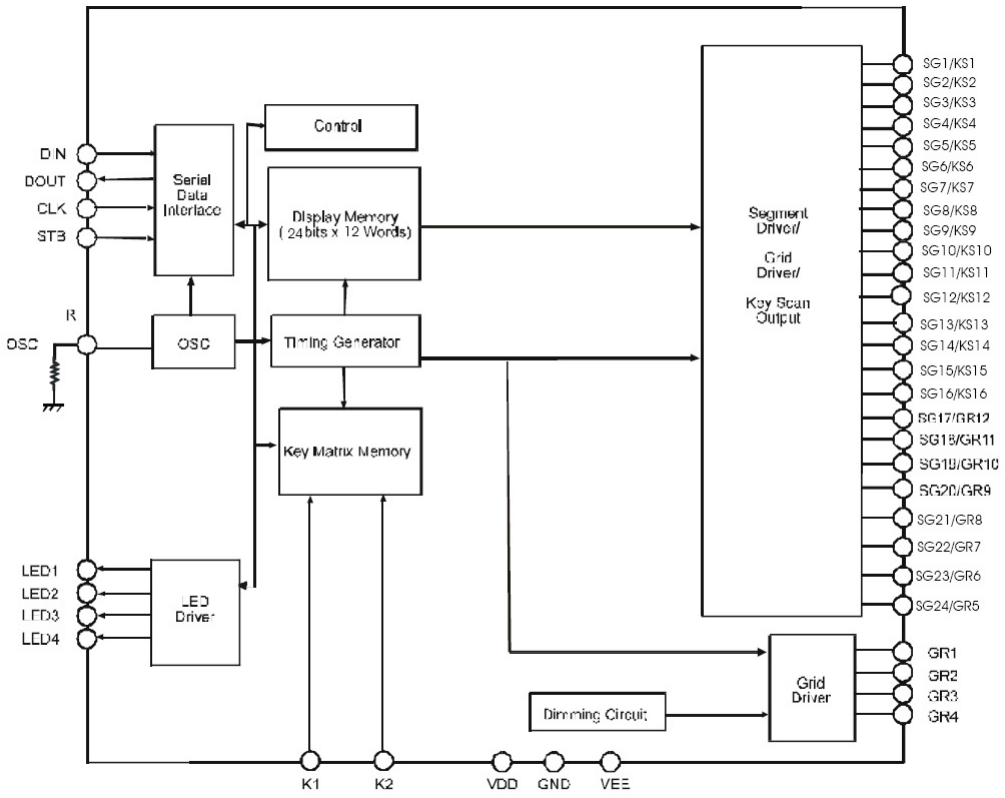
SOT-223



DPAK

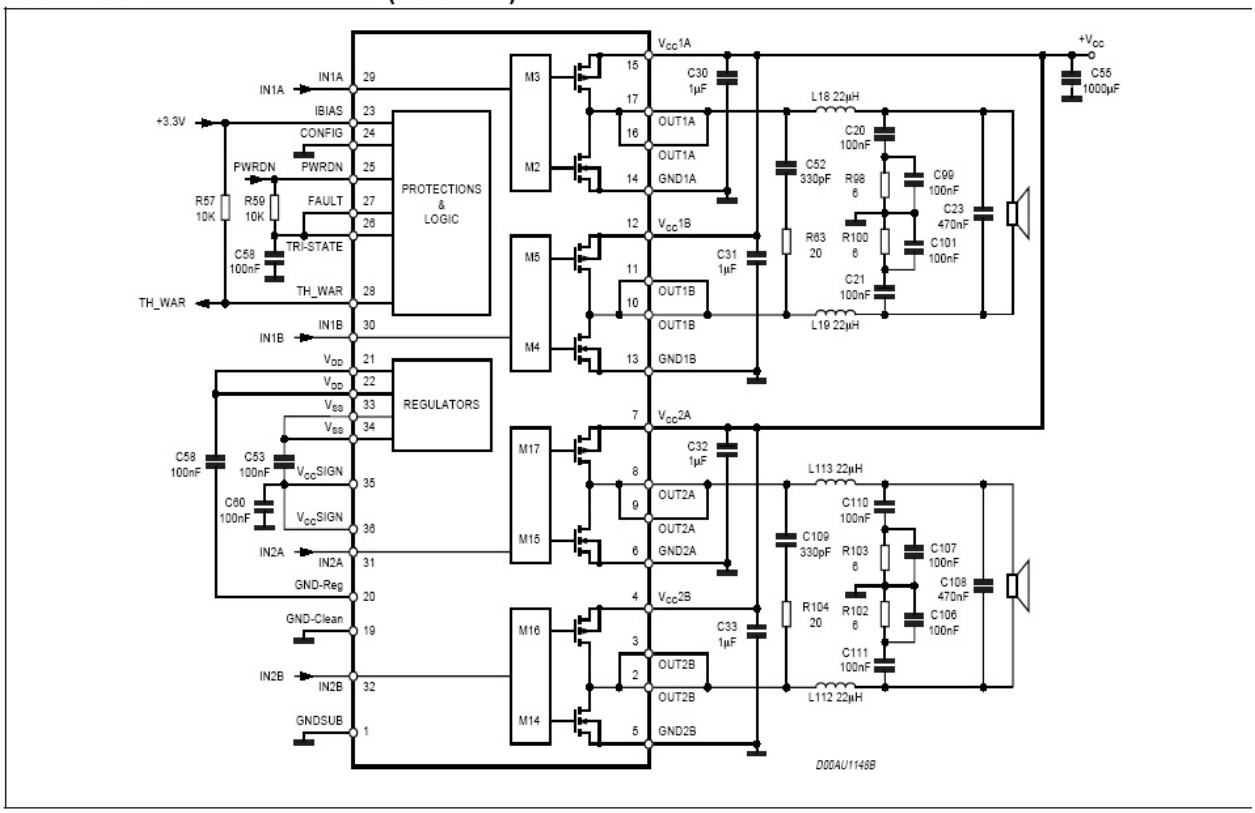
8. Internal Block Diagram of ICs

● PT6315



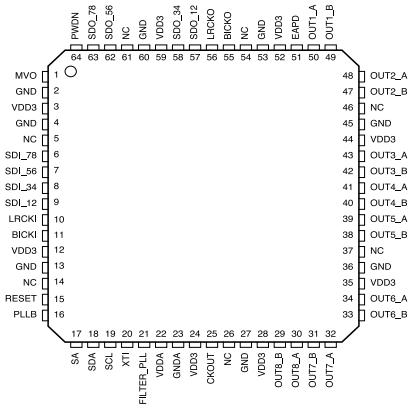
● STA505

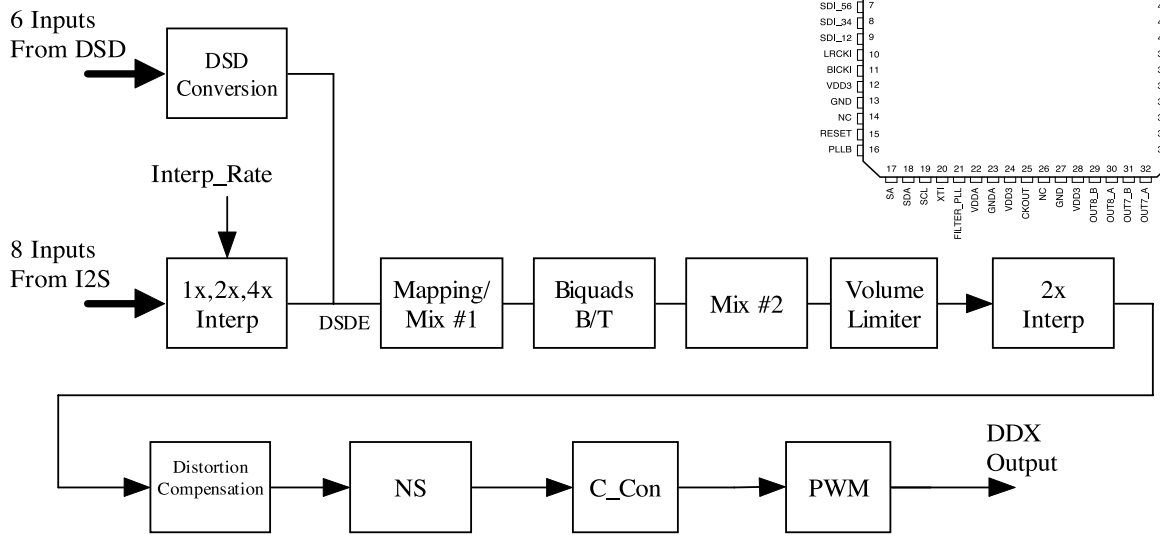
AUDIO APPLICATION CIRCUIT (Dual BTL)

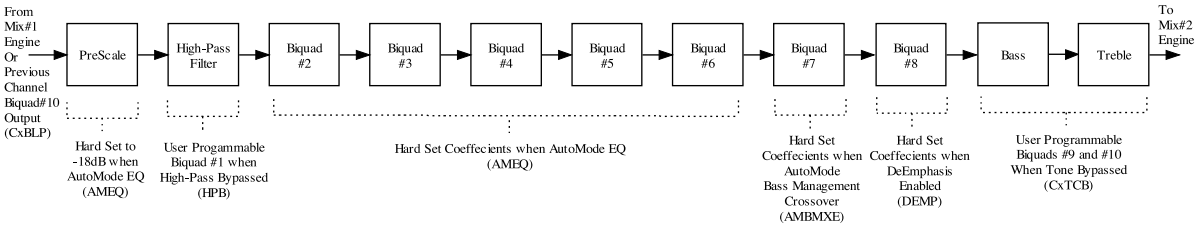


8. Internal Block Diagram of ICs

● STA308A

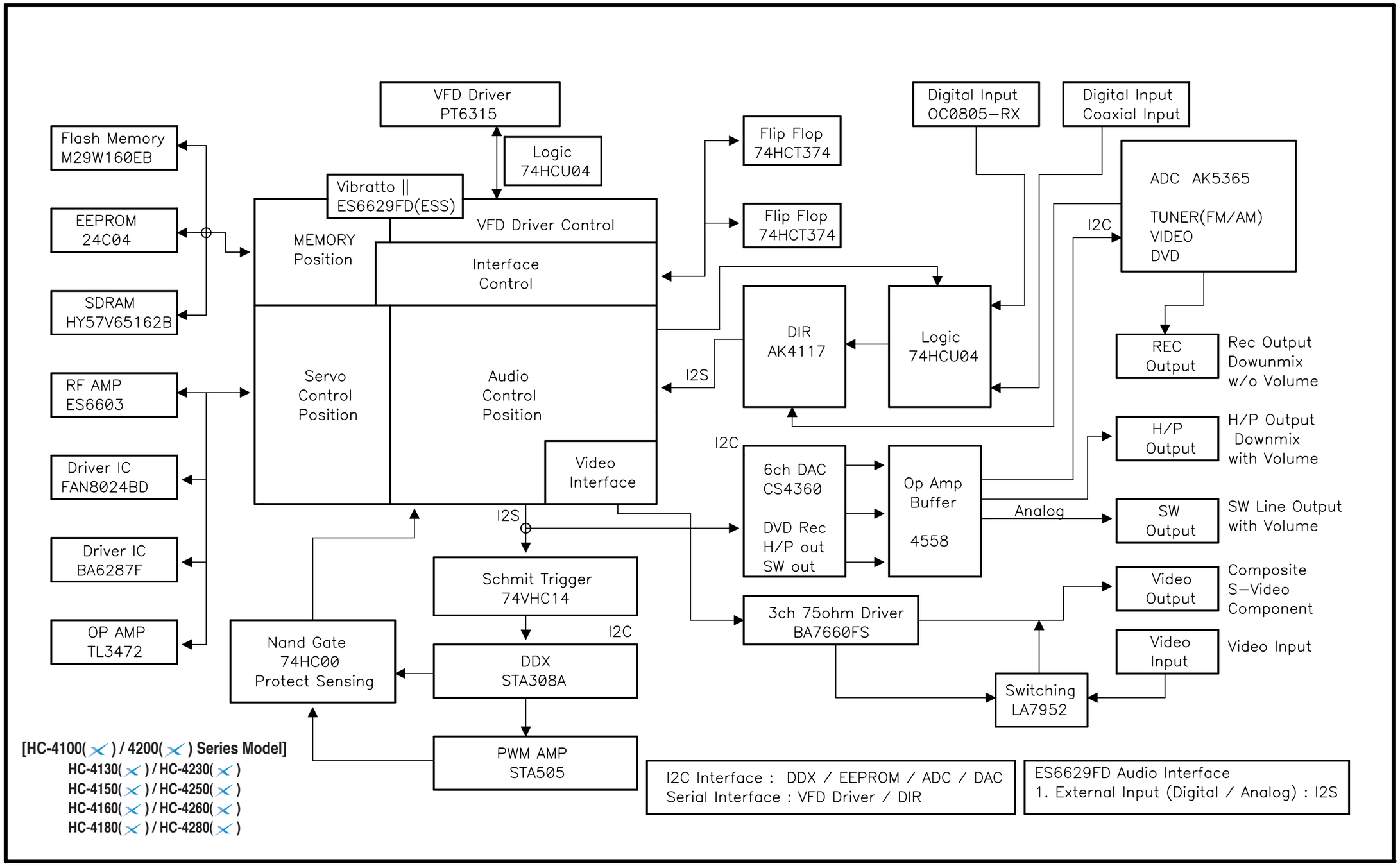






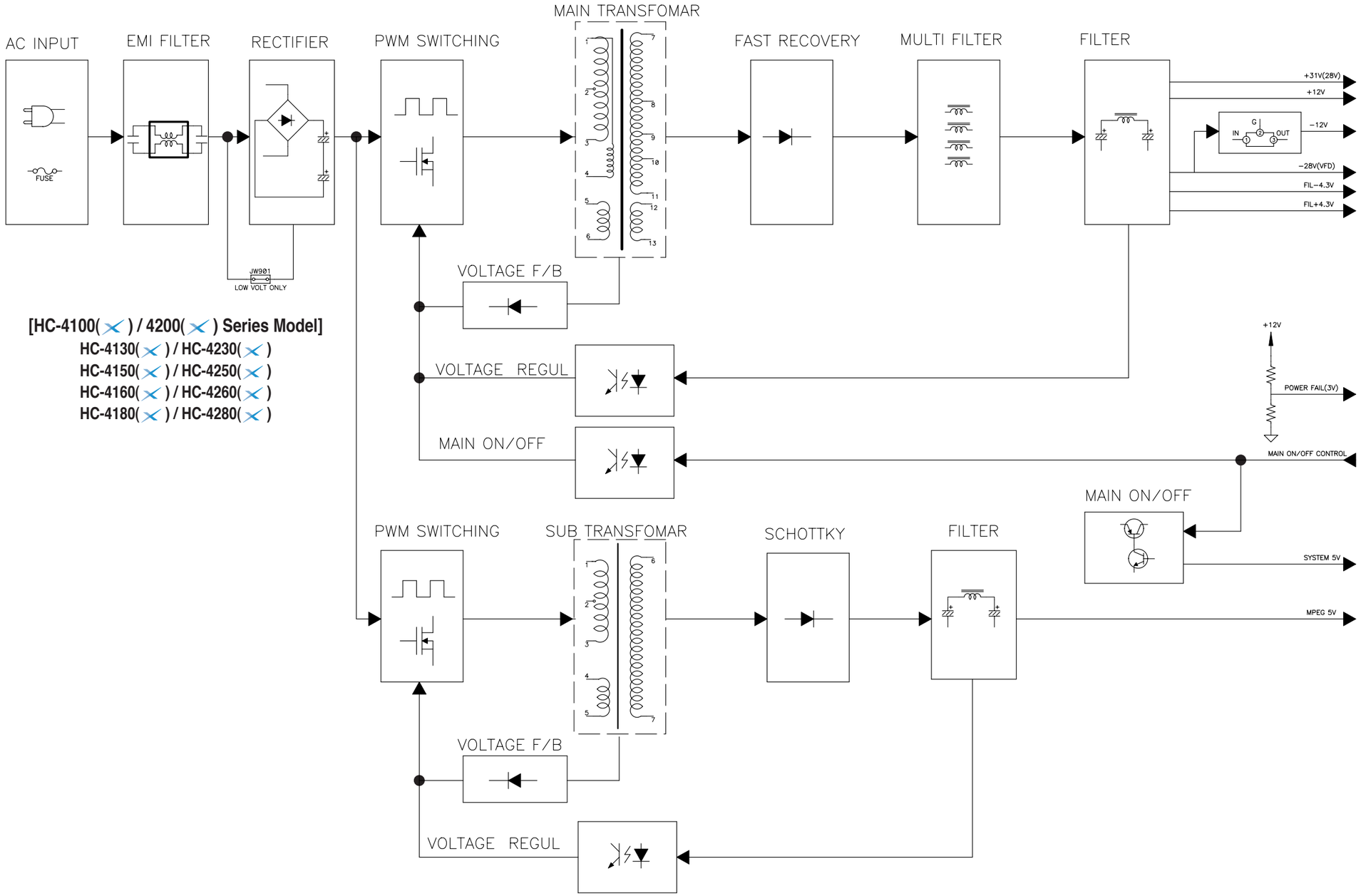
9. Block Diagram

• **Main Block**



9. Block Diagram

• SMPS Block

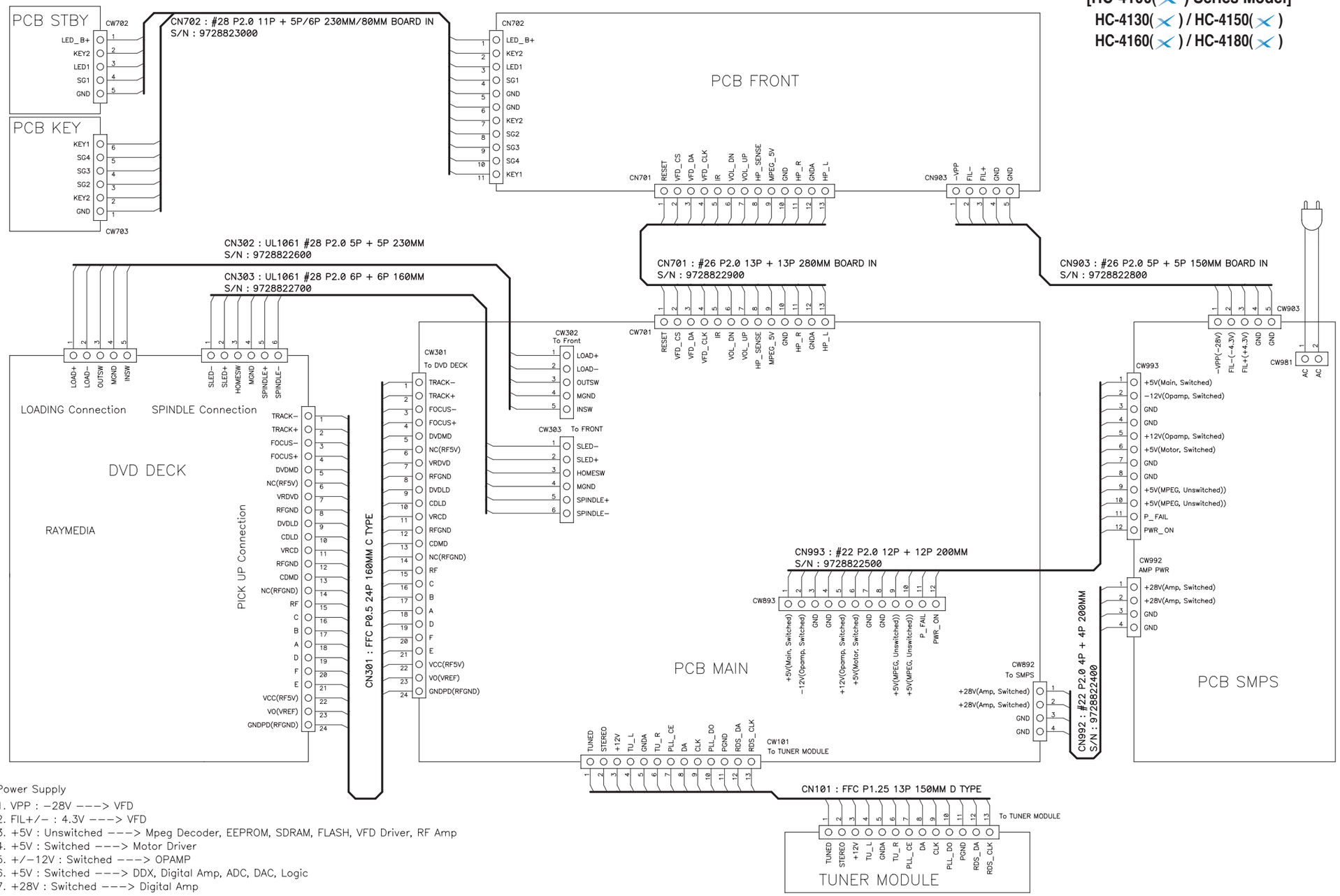


[HC-4100(✕) / 4200(✕) Series Model]
HC-4130(✕) / HC-4230(✕)
HC-4150(✕) / HC-4250(✕)
HC-4160(✕) / HC-4260(✕)
HC-4180(✕) / HC-4280(✕)

10. Wiring Diagram

- **[HC-4100(✕) Series Only]**

[HC-4100(✕) Series Model]
HC-4130(✕) / HC-4150(✕)
HC-4160(✕) / HC-4180(✕)



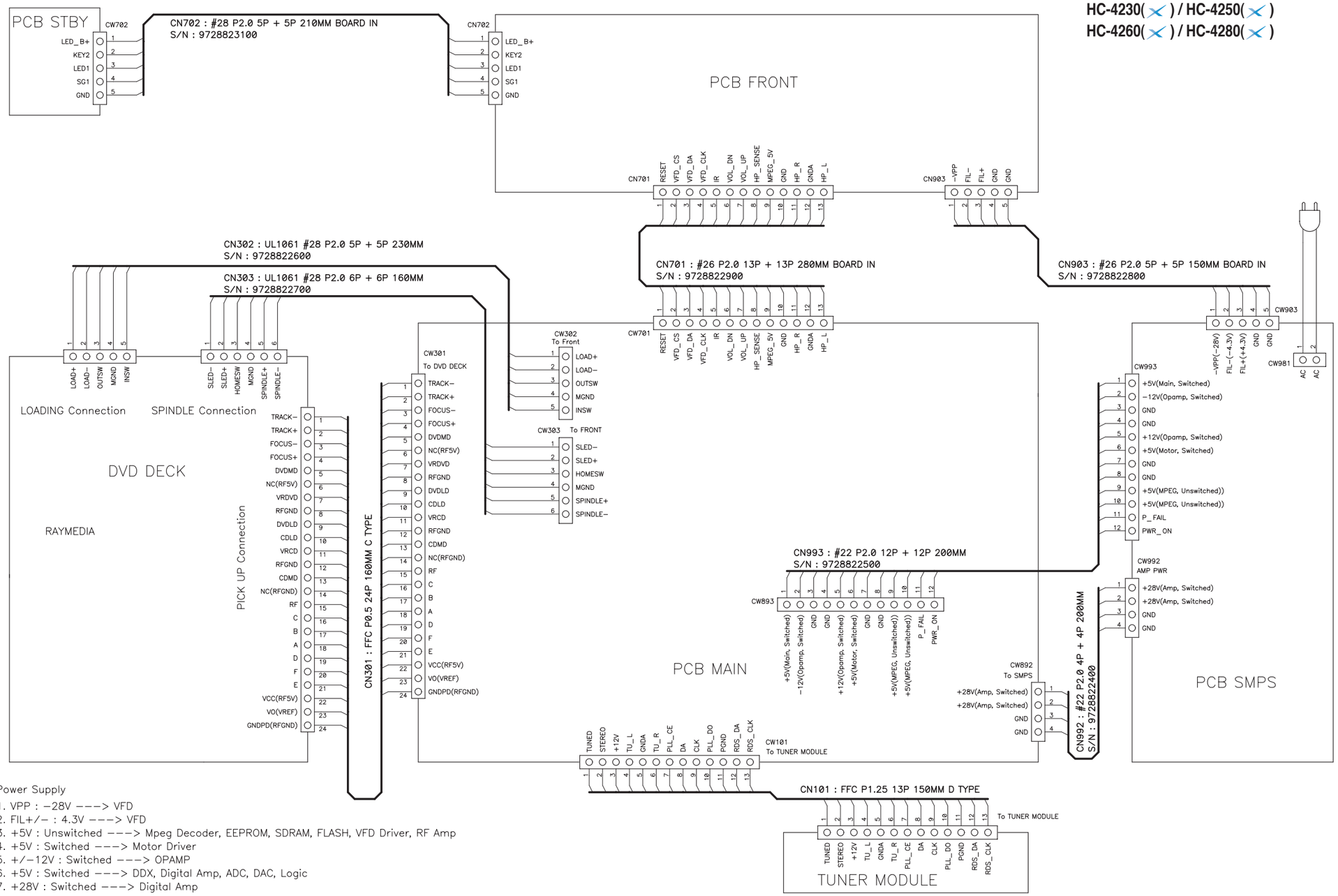
Power Supply

1. VPP : −28V ---> VFD
2. FIL+/− : 4.3V ---> VFD
3. +5V : Unswitched ---> Mpeg Decoder, EEPROM, SDRAM, FLASH, VFD Driver, RF Amp
4. +5V : Switched ---> Motor Driver
5. +/−12V : Switched ---> OPAMP
6. +5V : Switched ---> DDX, Digital Amp, ADC, DAC, Logic
7. +28V : Switched ---> Digital Amp

10. Wiring Diagram

- **[HC-4200(×) Series Only]**

[HC-4200(×) Series Model]
HC-4230(×) / HC-4250(×)
HC-4260(×) / HC-4280(×)

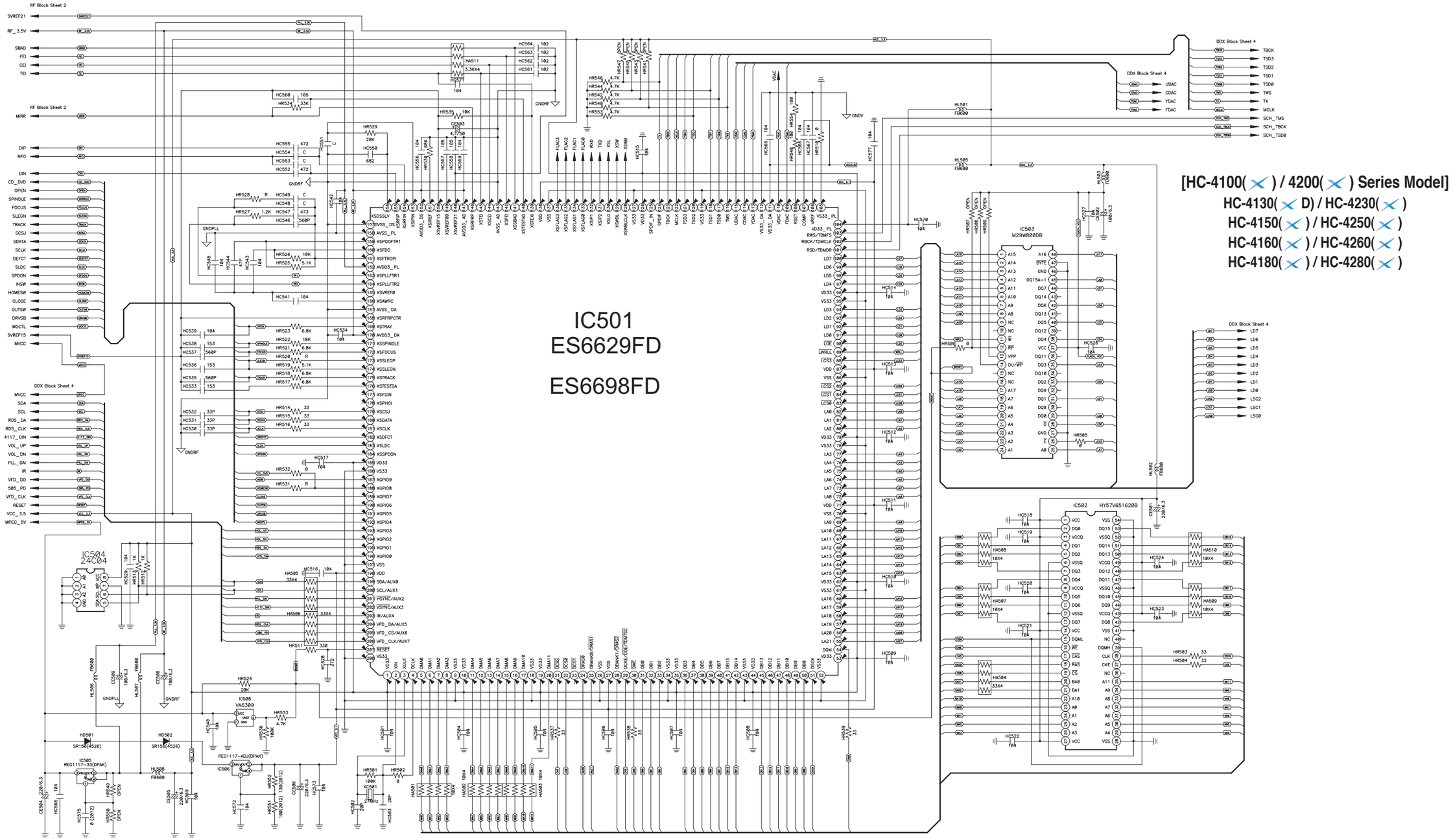


Power Supply

1. VPP : −28V −−−> VFD
2. FIL+/− : 4.3V −−−> VFD
3. +5V : Unswitched −−−> Mpeg Decoder, EEPROM, SDRAM, FLASH, VFD Driver, RF Amp
4. +5V : Switched −−−> Motor Driver
5. +/−12V : Switched −−−> OPAMP
6. +5V : Switched −−−> DDX, Digital Amp, ADC, DAC, Logic
7. +28V : Switched −−−> Digital Amp

11. Schematic Diagram

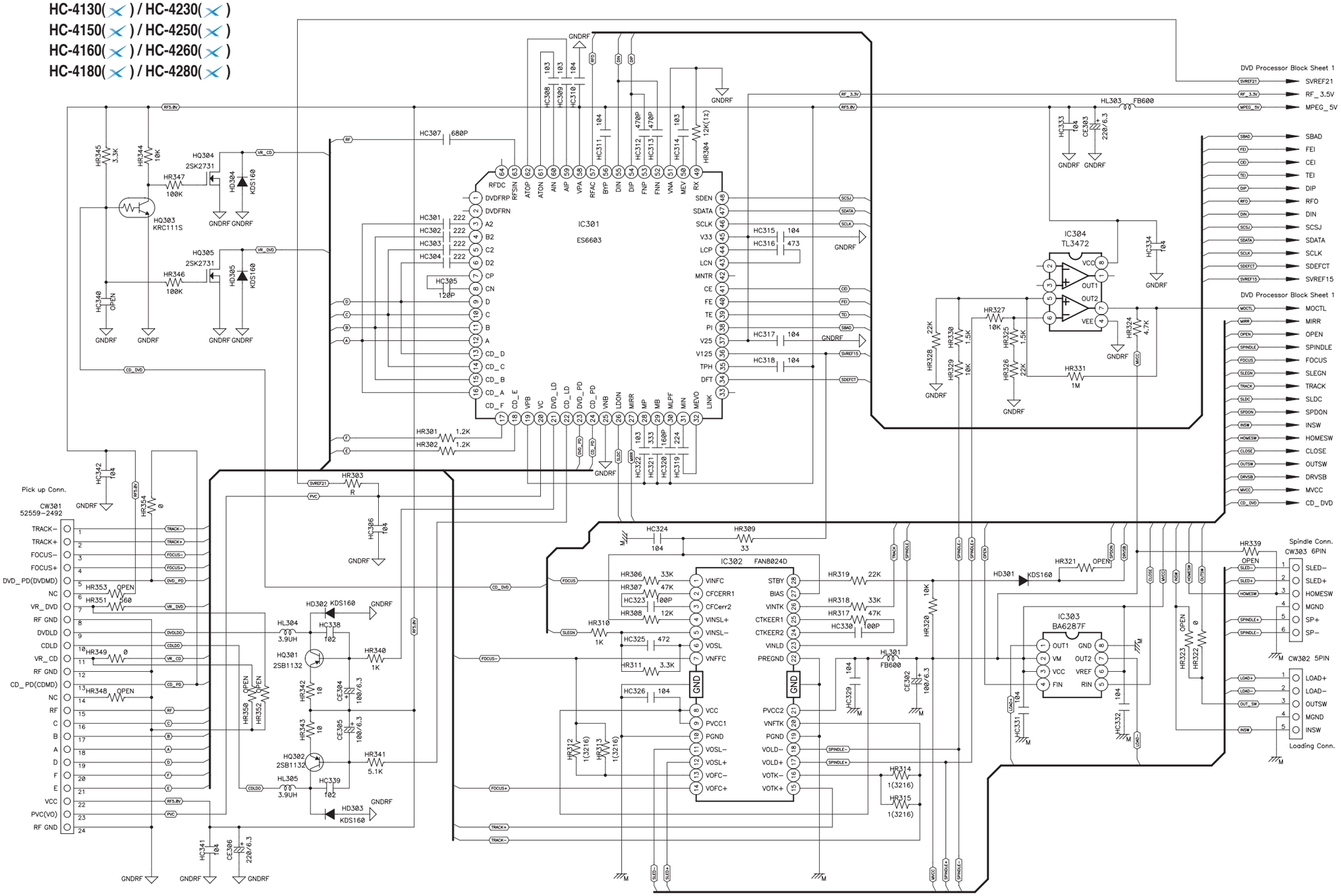
• DVD Processor Section



11. Schematic Diagram

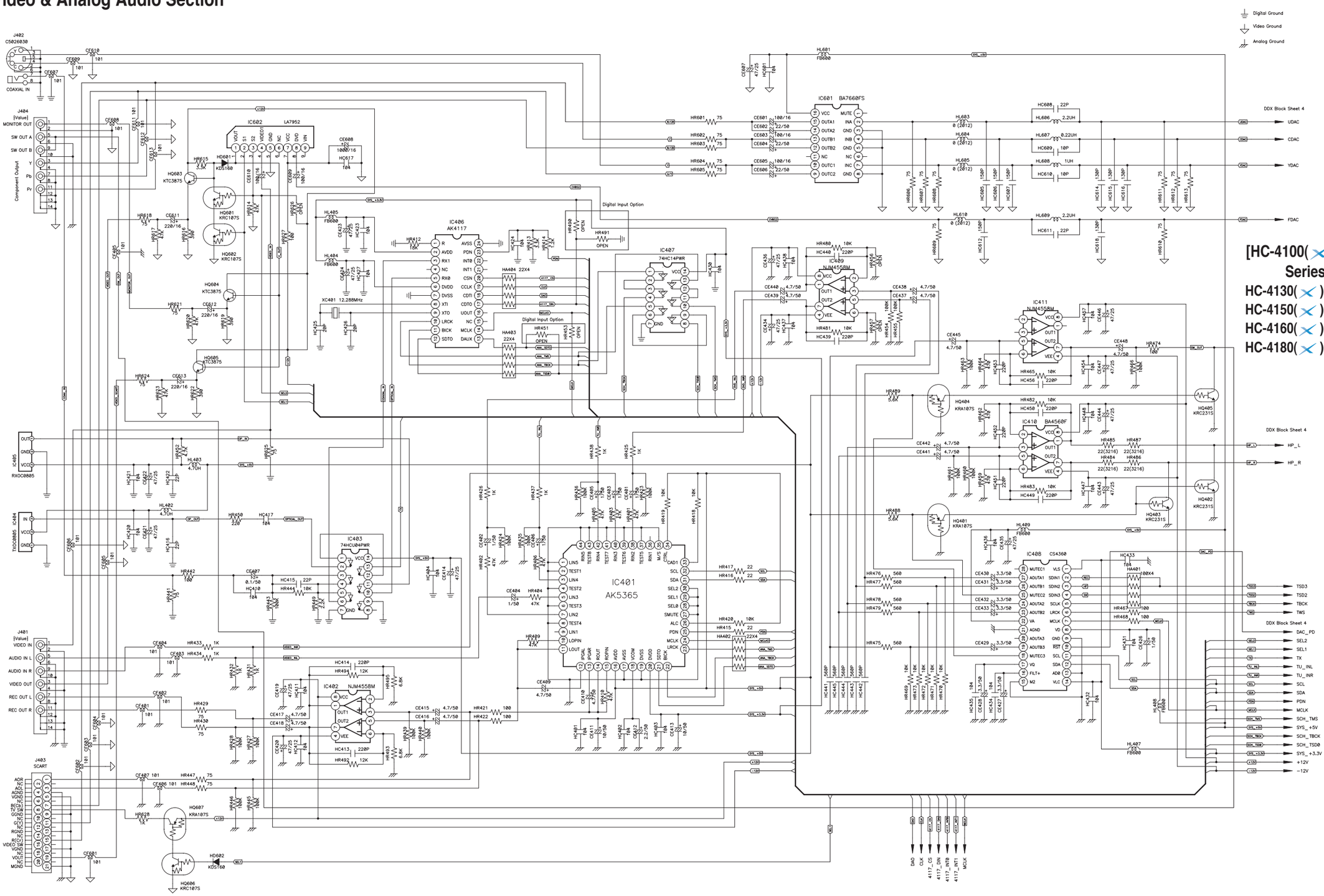
• DVD RF Section

[HC-4100(✕) / 4200(✕) Series Model]
HC-4130(✕) / HC-4230(✕)
HC-4150(✕) / HC-4250(✕)
HC-4160(✕) / HC-4260(✕)
HC-4180(✕) / HC-4280(✕)



11. Schematic Diagram

• Video & Analog Audio Section

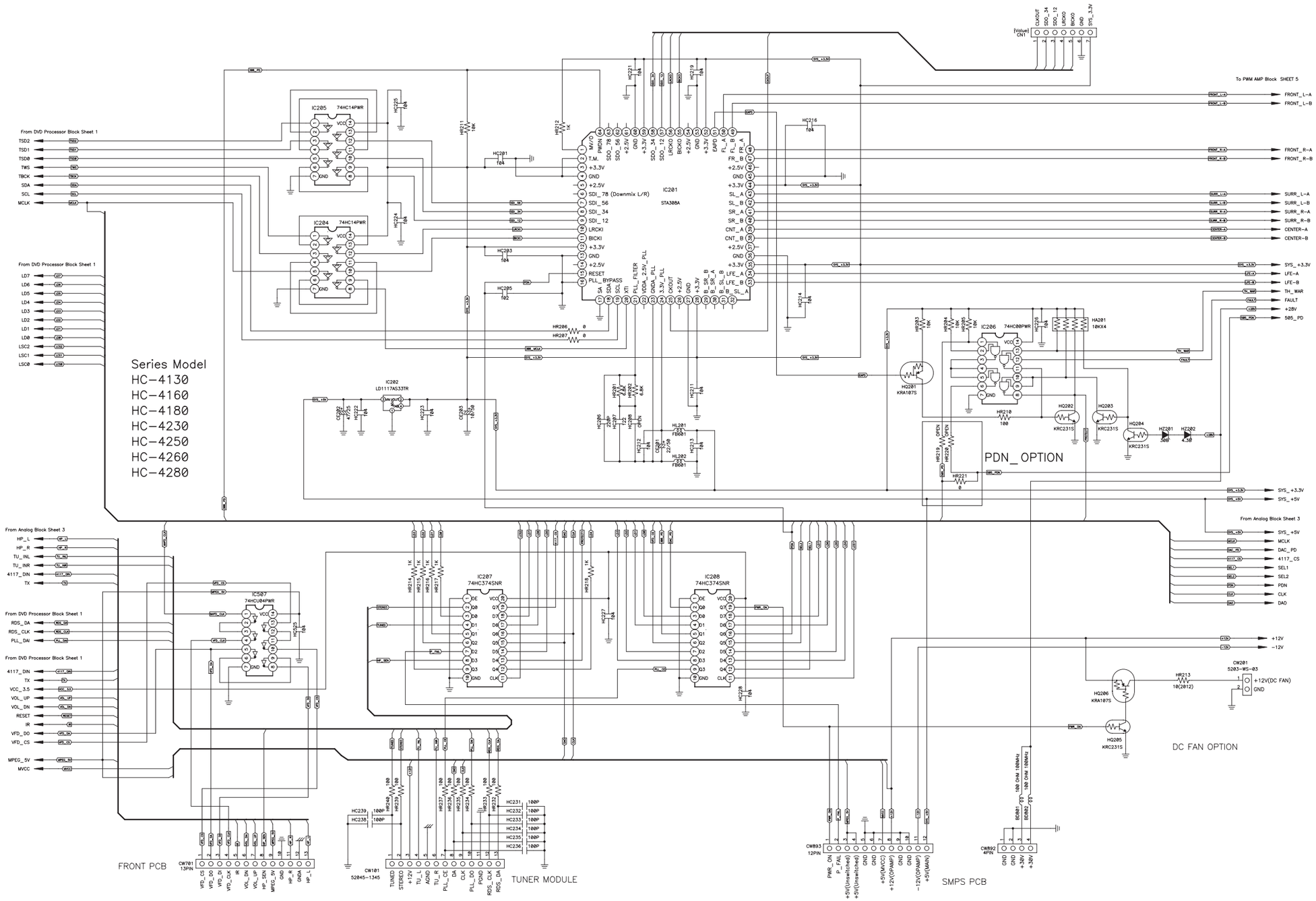


[HC-4100(✕) / 4200(✕) Series Model]

HC-4130(✕) / HC-4230(✕)
HC-4150(✕) / HC-4250(✕)
HC-4160(✕) / HC-4260(✕)
HC-4180(✕) / HC-4280(✕)

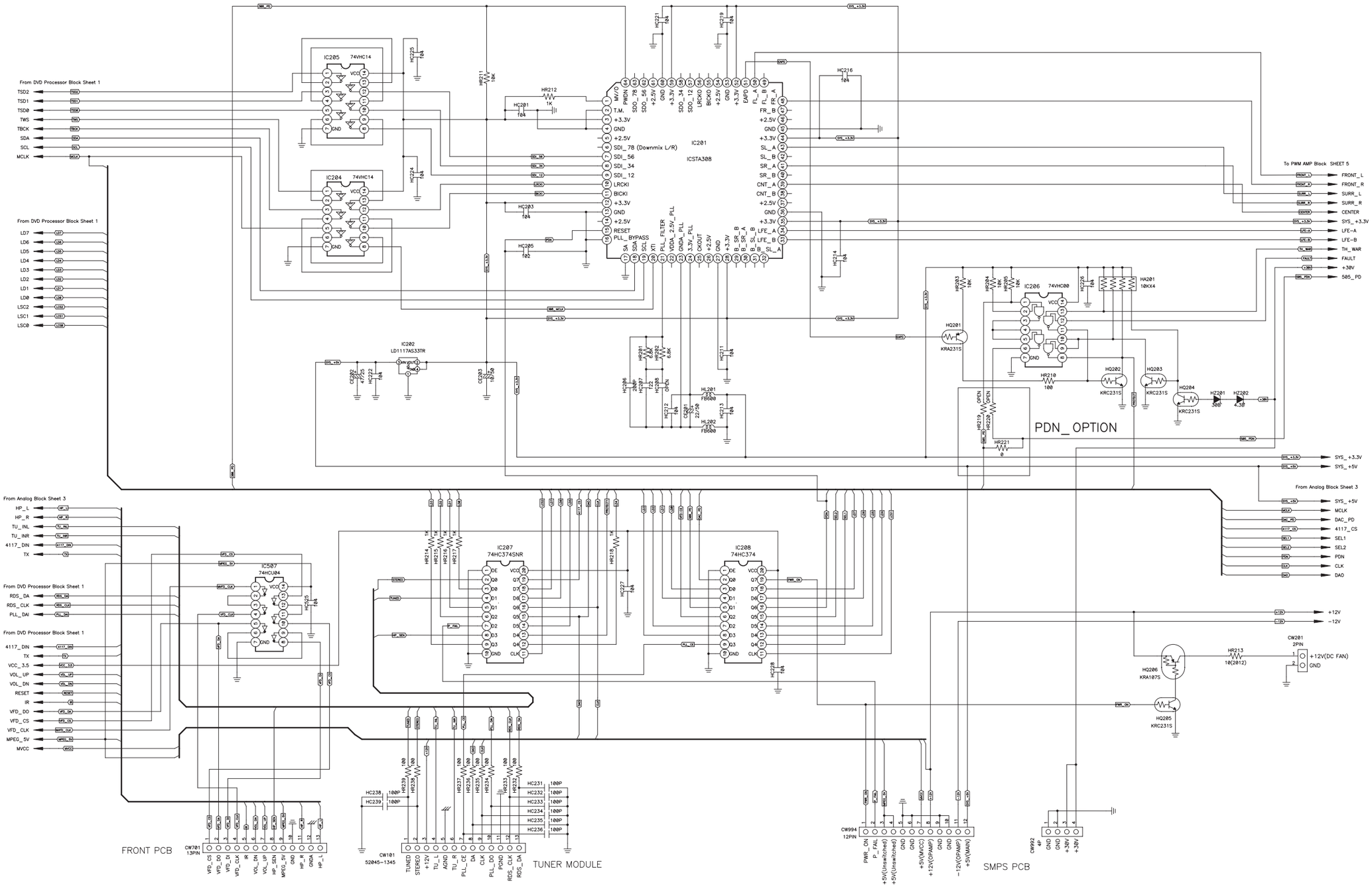
11. Schematic Diagram

• DDX Section [HC-4150(✕) / 4160(✕) / 4180(✕) / 4250(✕) / 4260(✕) / 4280(✕) Only]



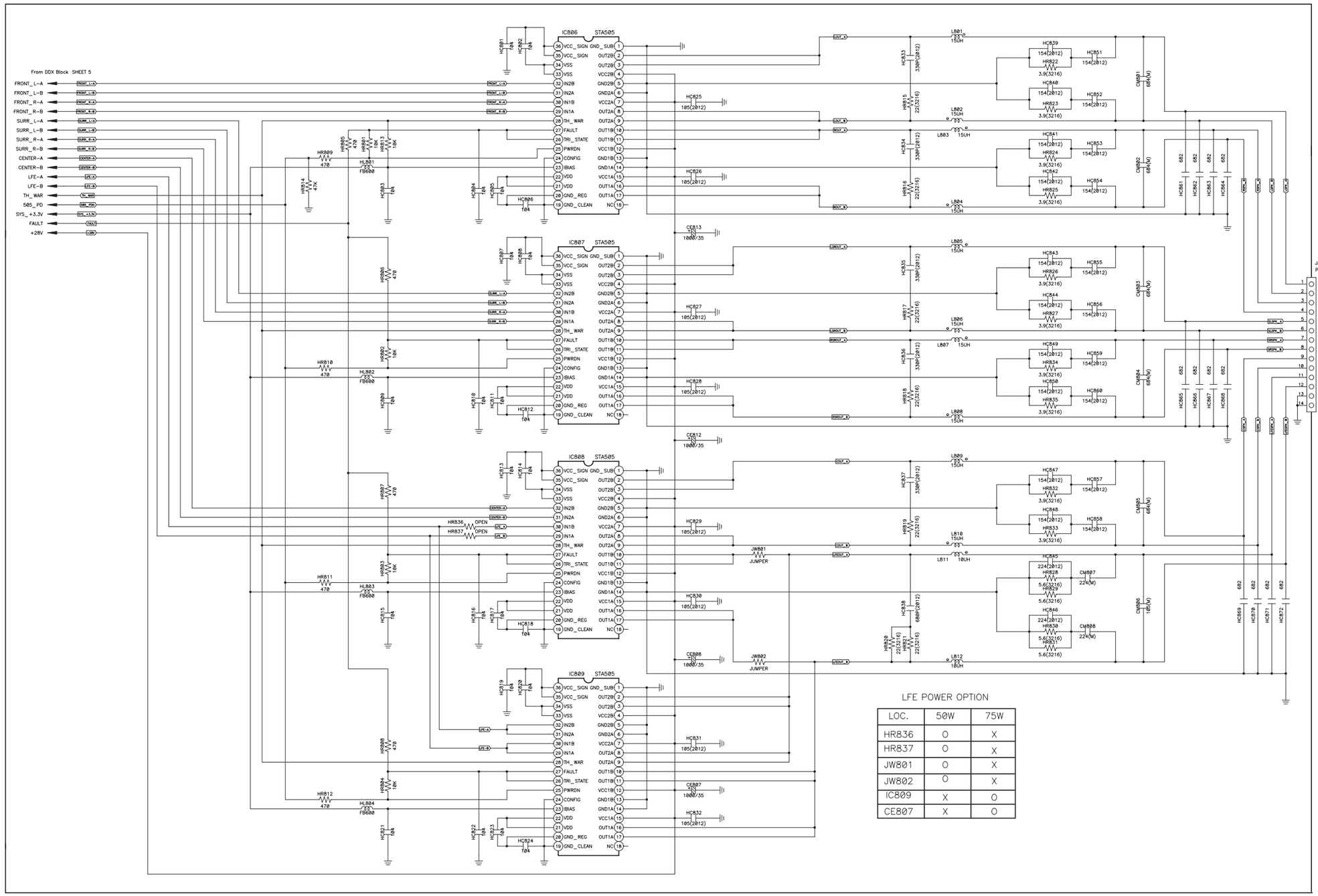
11. Schematic Diagram

• DDX Section [HC-4130(✕) / 4230(✕) Only]



11. Schematic Diagram

• PWM Amp. Section [HC-4150(✕) / 4160(✕) / 4180(✕) / 4250(✕) / 4260(✕) / 4280(✕) Only]

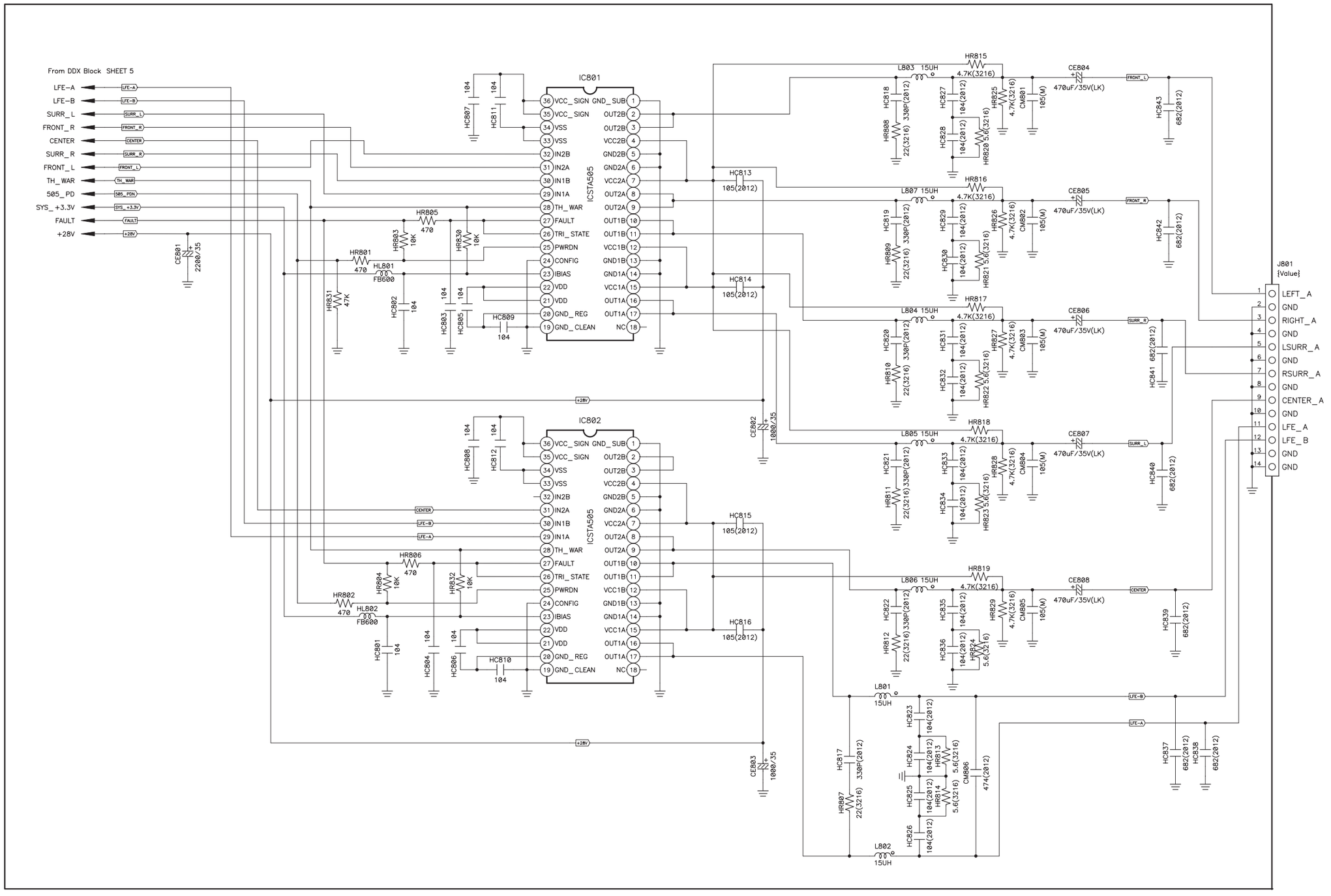


LFE POWER OPTION

LOC.	50W	75W
HR836	O	X
HR837	O	X
JW801	O	X
JW802	O	X
IC809	X	O
CE807	X	O

11. Schematic Diagram

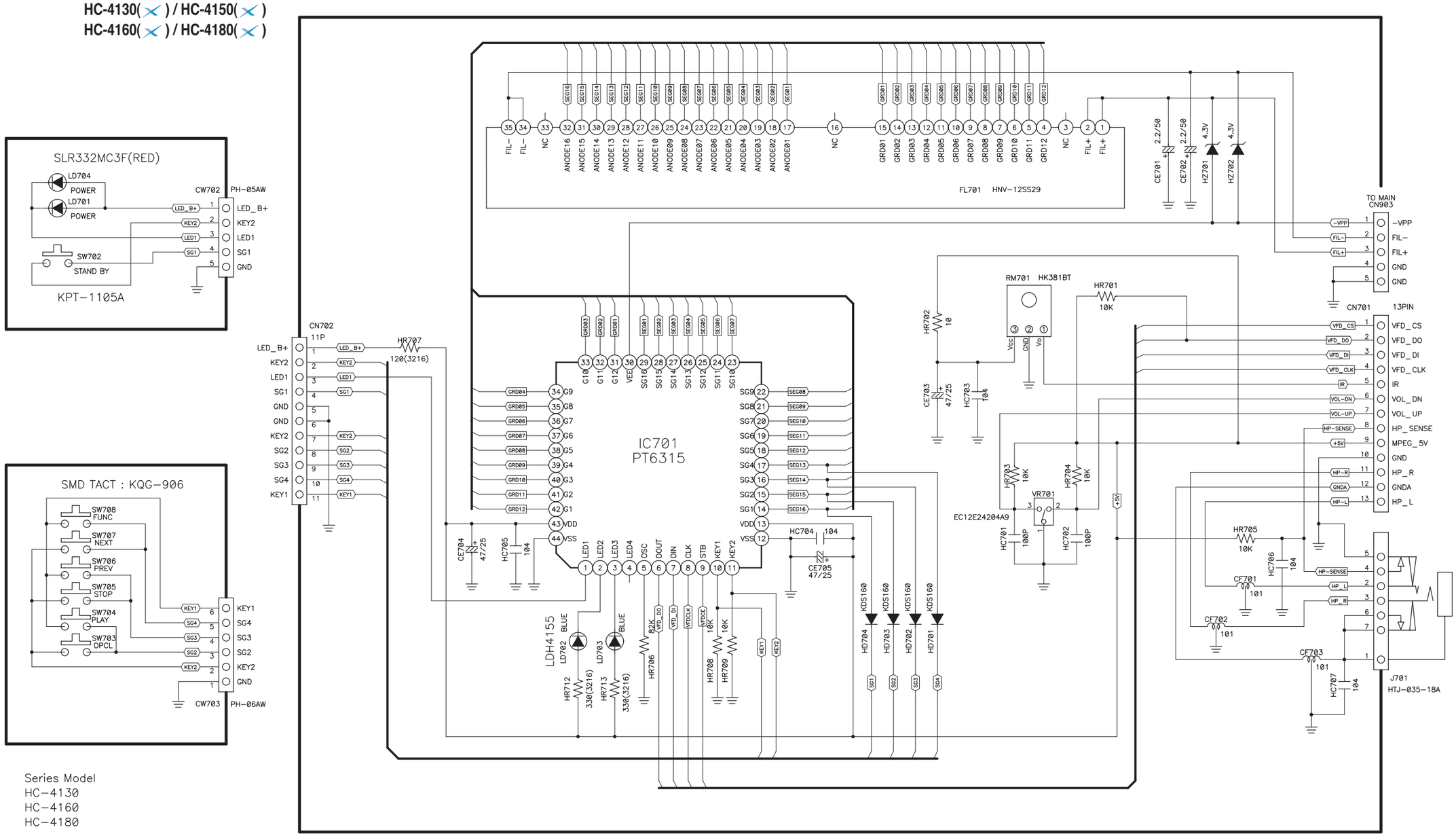
• PWM Amp. Section [HC-4130(✕) / 4230(✕) Only]



11. Schematic Diagram

• Front Section [HC-4100(✕) Series Only]

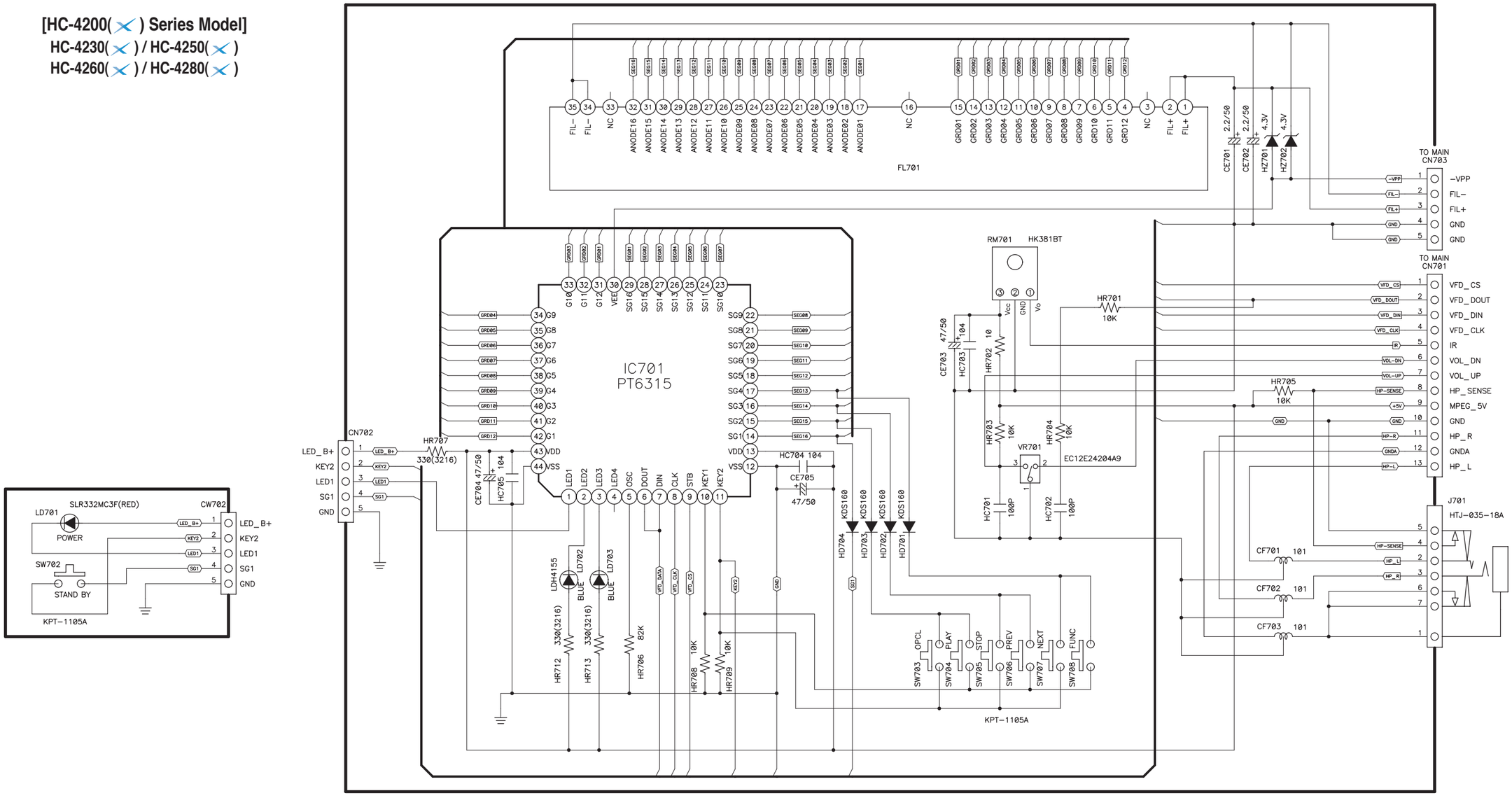
[HC-4100(✕) Series Model]
HC-4130(✕) / HC-4150(✕)
HC-4160(✕) / HC-4180(✕)



11. Schematic Diagram

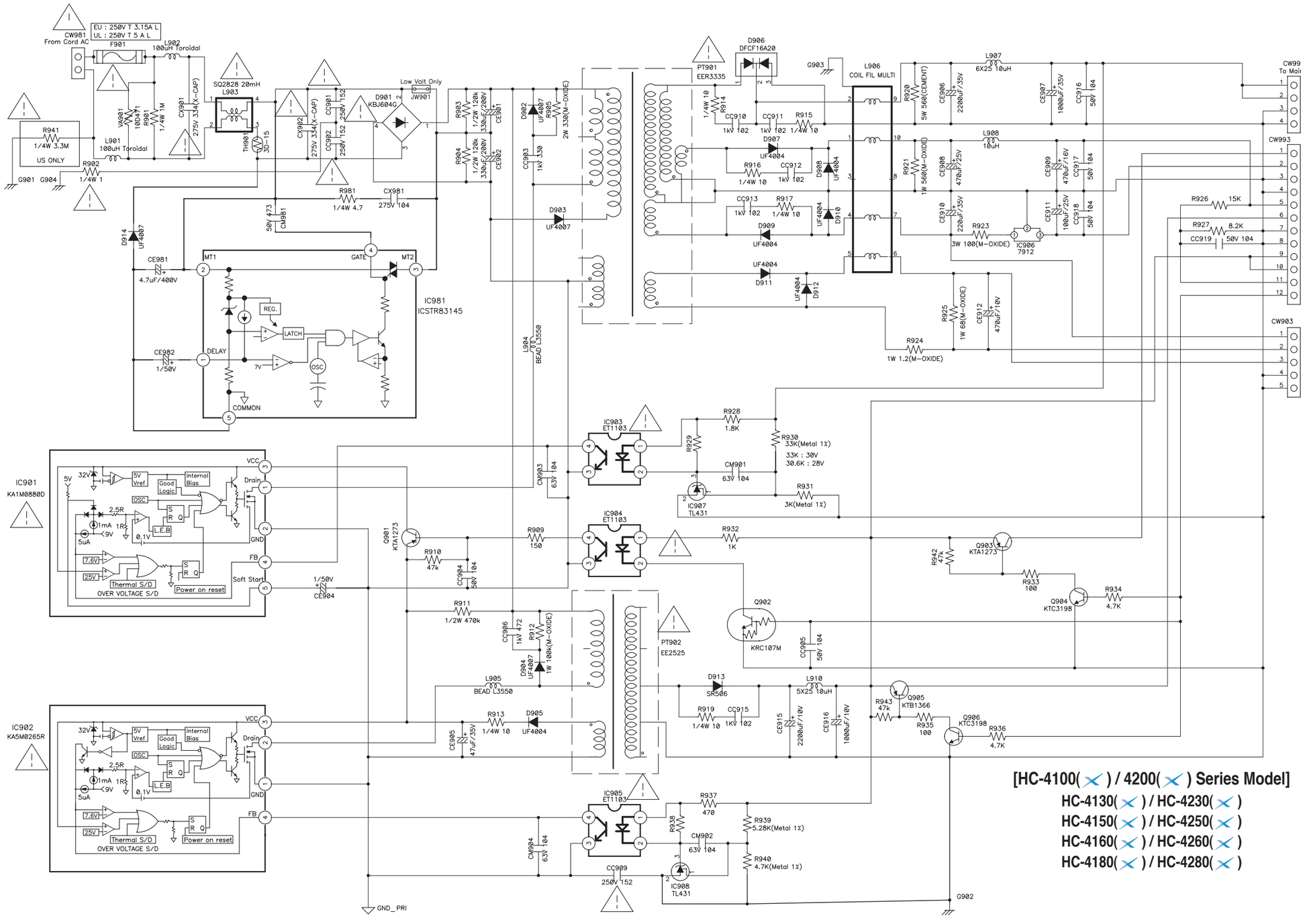
• Front Section [HC-4200(✕) Series Only]

[HC-4200(✕) Series Model]
HC-4230(✕) / HC-4250(✕)
HC-4260(✕) / HC-4280(✕)



11. Schematic Diagram

• SMPS Section

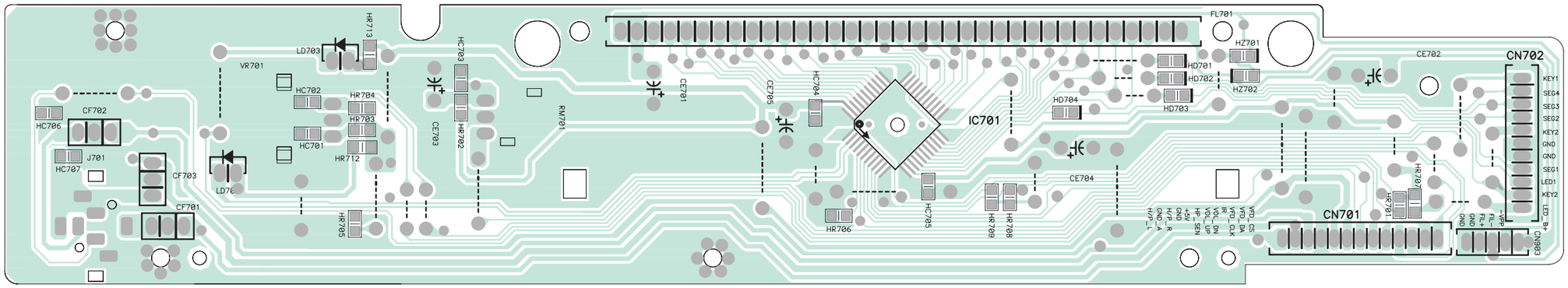


[HC-4100(✕) / 4200(✕) Series Model]

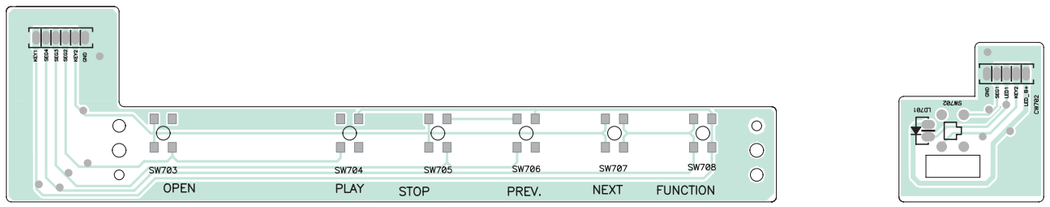
HC-4130(✕) / HC-4230(✕)
HC-4150(✕) / HC-4250(✕)
HC-4160(✕) / HC-4260(✕)
HC-4180(✕) / HC-4280(✕)

12. Printed Circuit Diagram

• Front [Bottom View] : HC-4100(✕) Series Only

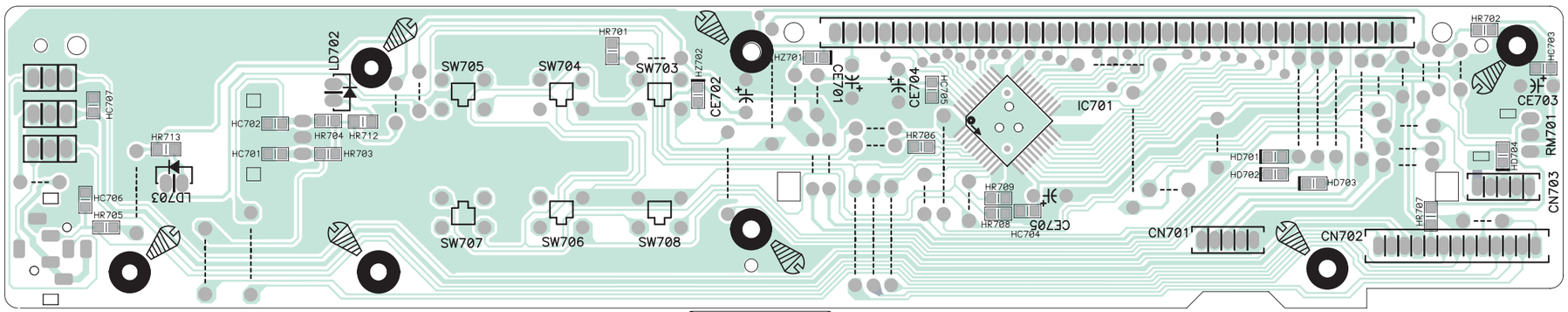


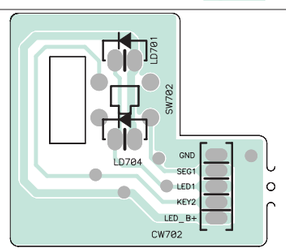
• Key & Power [Bottom View] : HC-4100(✕) Series Only



[HC-4100(✕) Series Model]
HC-4130(✕) / HC-4150(✕)
HC-4160(✕) / HC-4180(✕)

• Front [Bottom View] : HC-4200(✕) Series Only

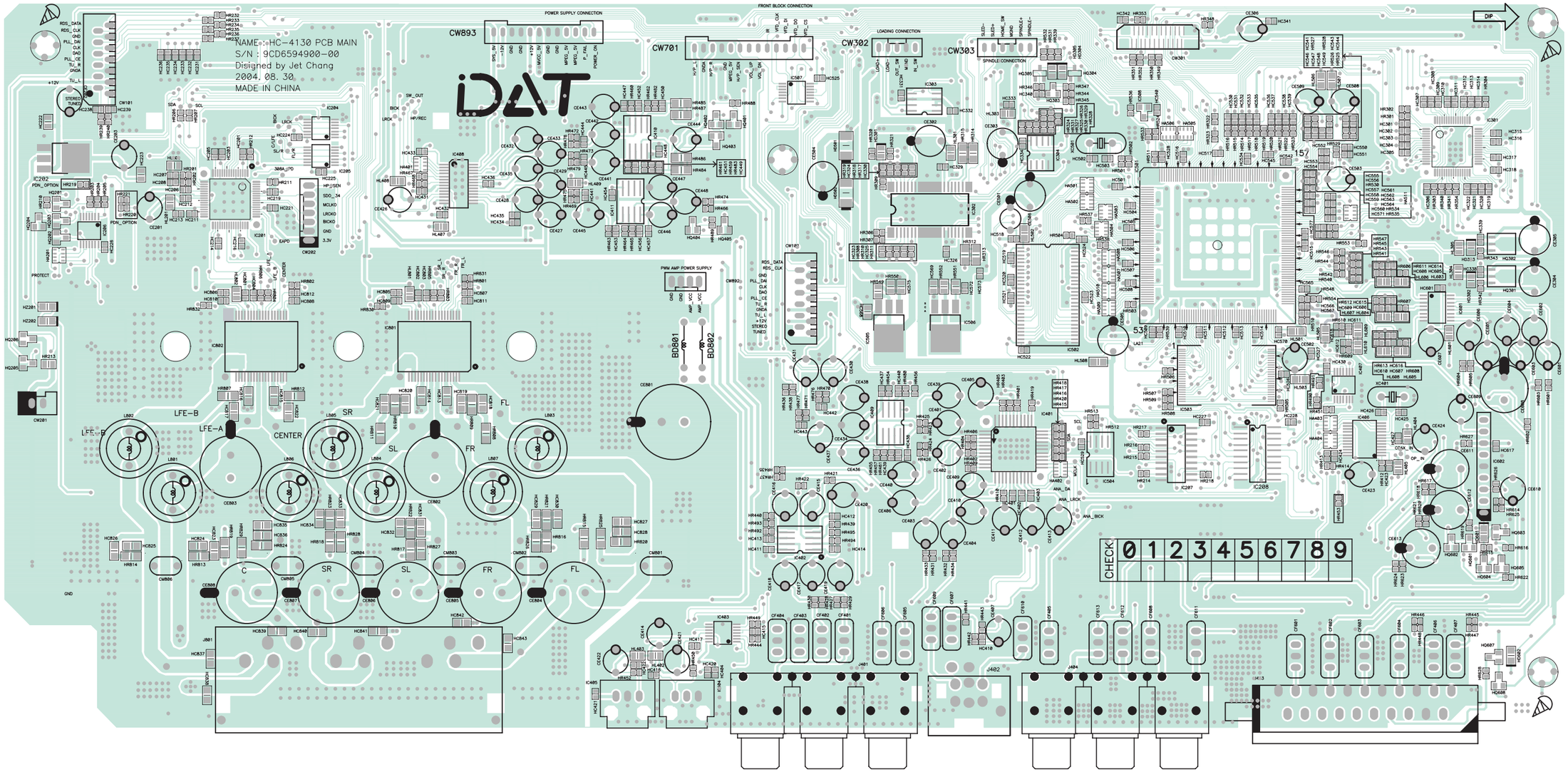




[HC-4200(✕) Series Model]
HC-4230(✕) / HC-4250(✕)
HC-4260(✕) / HC-4280(✕)

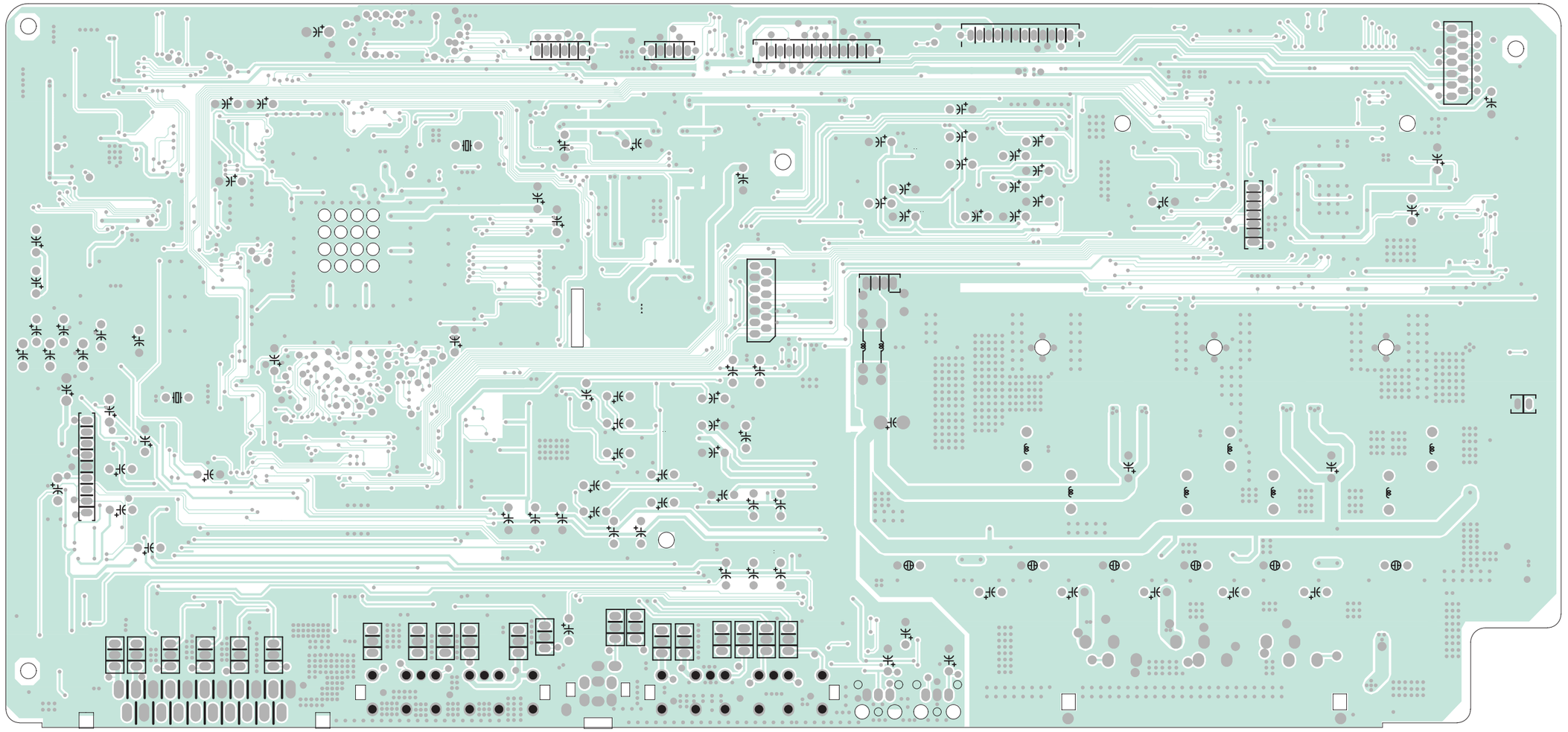
12. Printed Circuit Diagram

- **Main [Top View] : HC-4130( ) / 4230( ) Only**



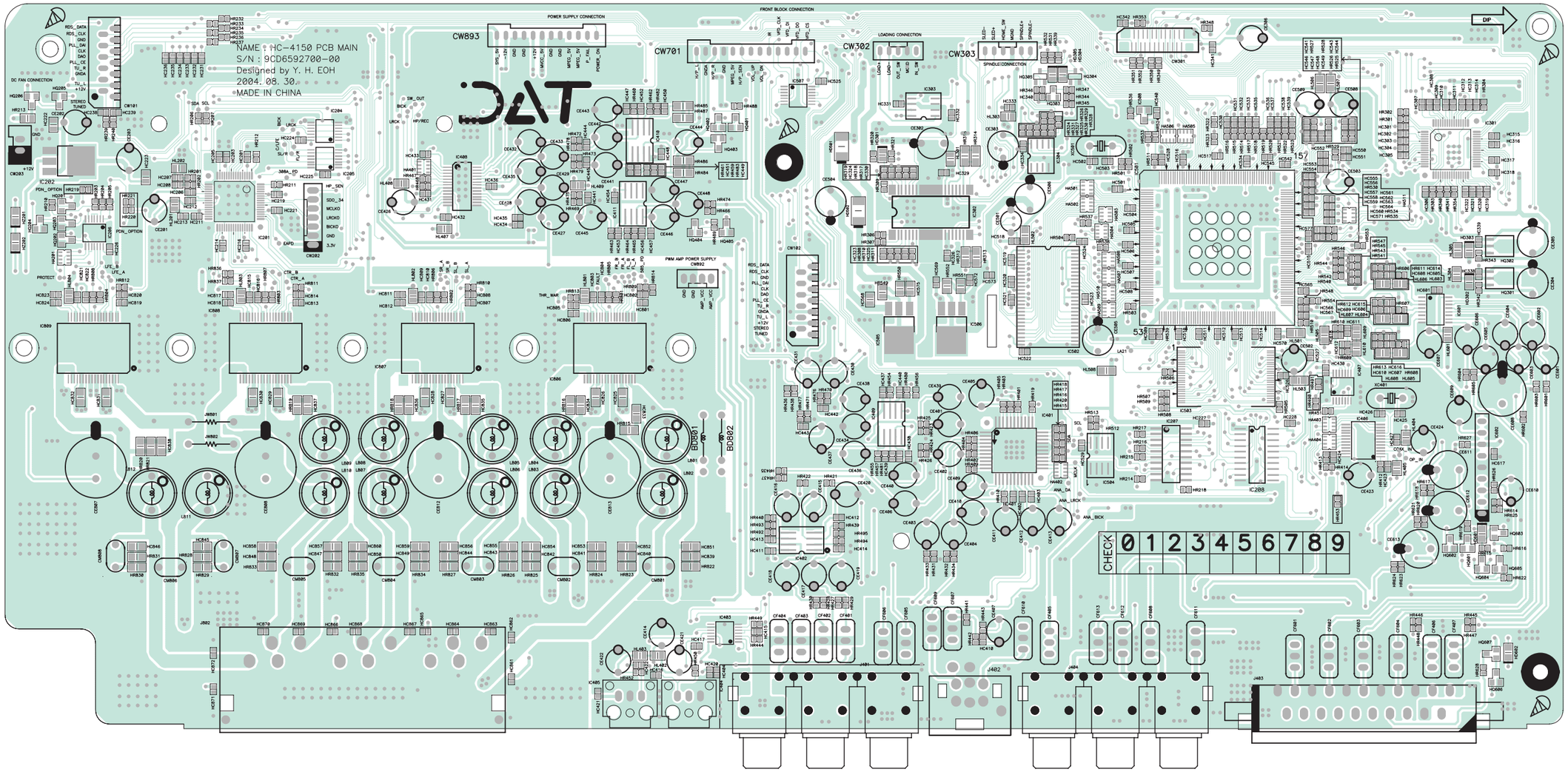
12. Printed Circuit Diagram

• Main [Bottom View] : HC-4130(✕) / 4230(✕) Only



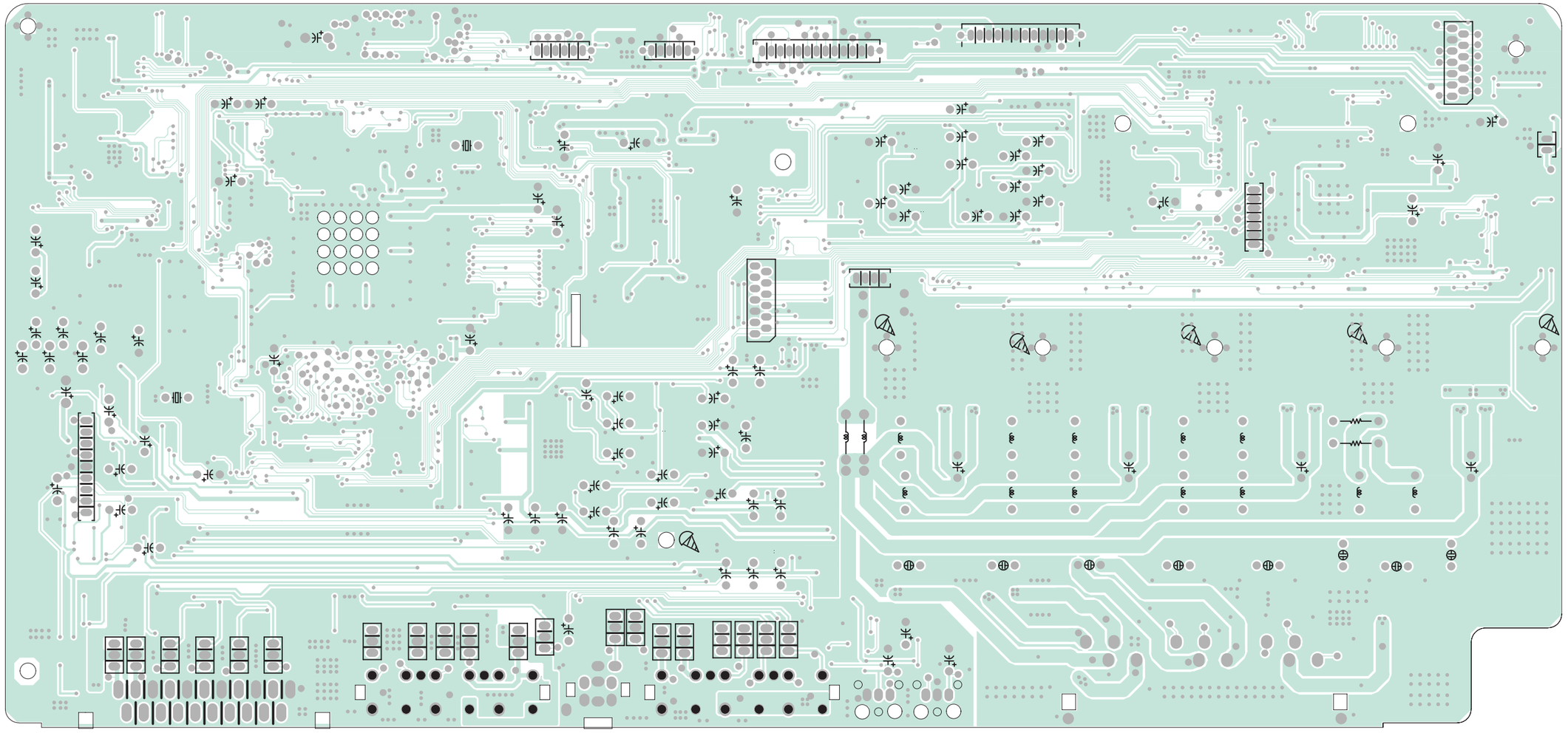
12. Printed Circuit Diagram

• Main [Top View] : HC-4150(✕) / 4160(✕) / 4180(✕) / 4250(✕) / 4260(✕) / 4280(✕) Only



12. Printed Circuit Diagram

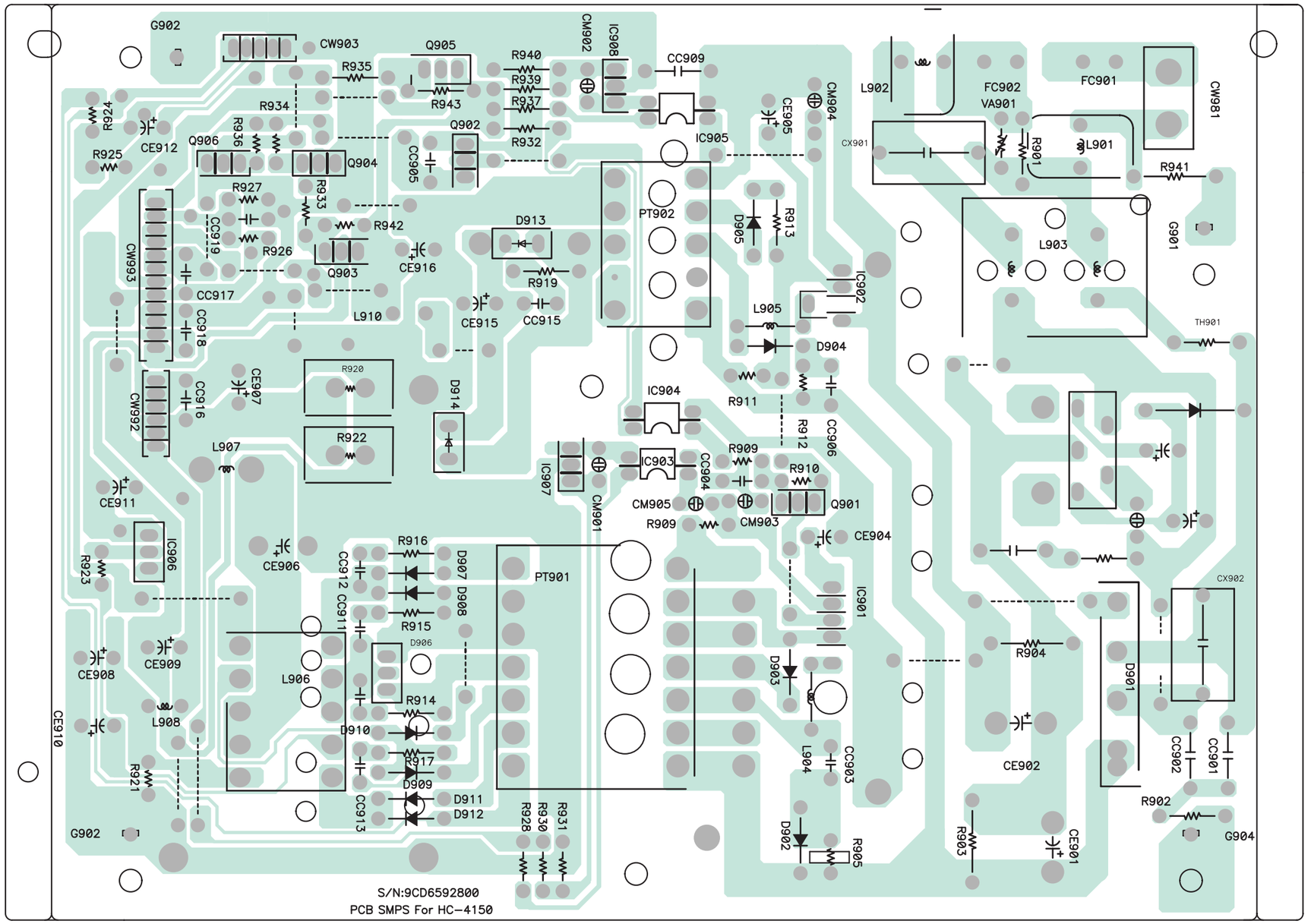
• Main [Bottom View] : HC-4150(✕) / 4160(✕) / 4180(✕) / 4250(✕) / 4260(✕) / 4280(✕) Only



12. Printed Circuit Diagram

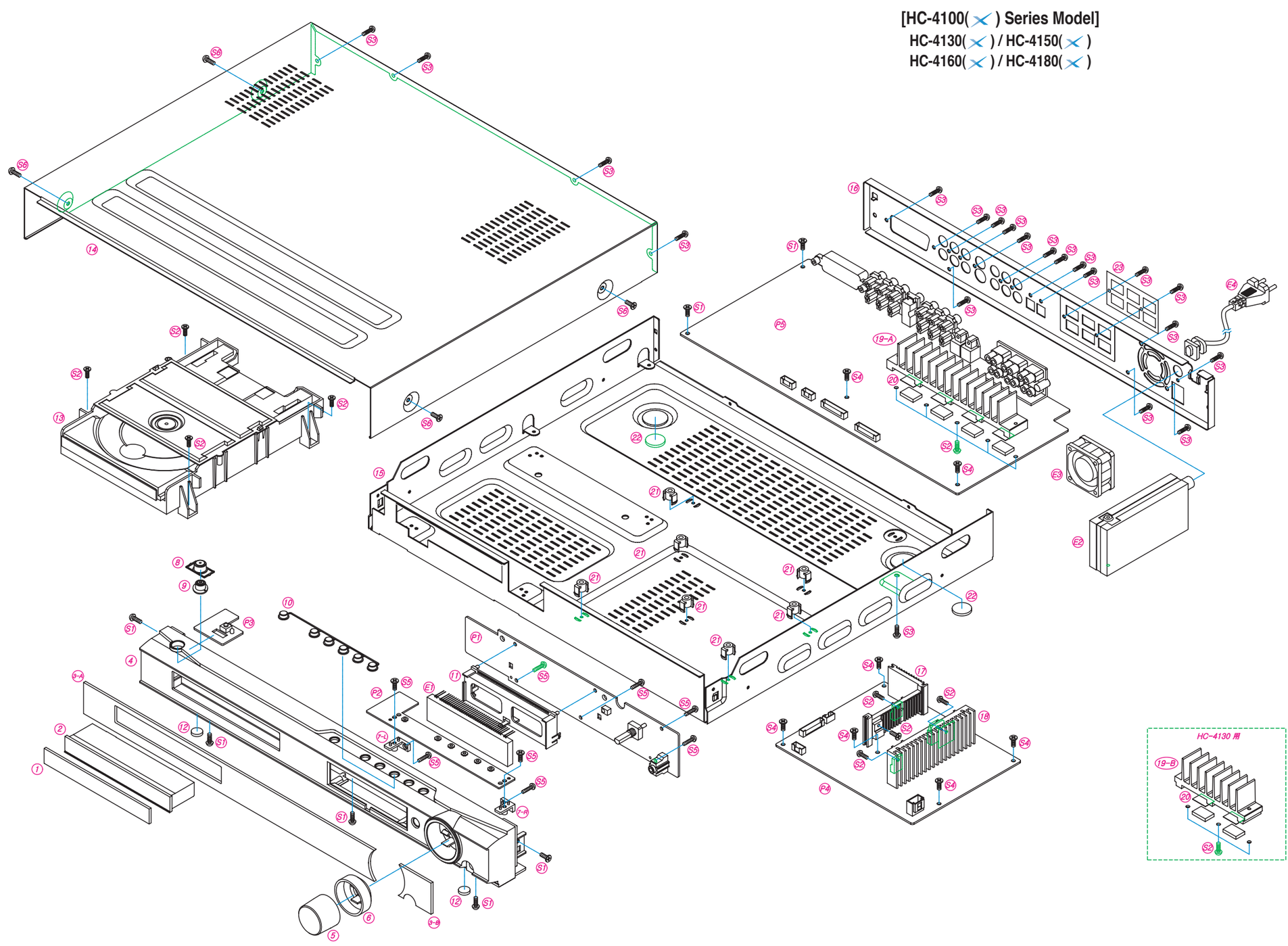
• SMPS [Bottom View]

[HC-4100(✕) / 4200(✕) Series Model]
HC-4130(✕) / HC-4230(✕)
HC-4150(✕) / HC-4250(✕)
HC-4160(✕) / HC-4260(✕)
HC-4180(✕) / HC-4280(✕)



14. Exploded View and Mechanical Parts List

• HC-4100(✕) Series Only



14. Exploded View and Mechanical Parts List

• HC-4100(✕) Series Only

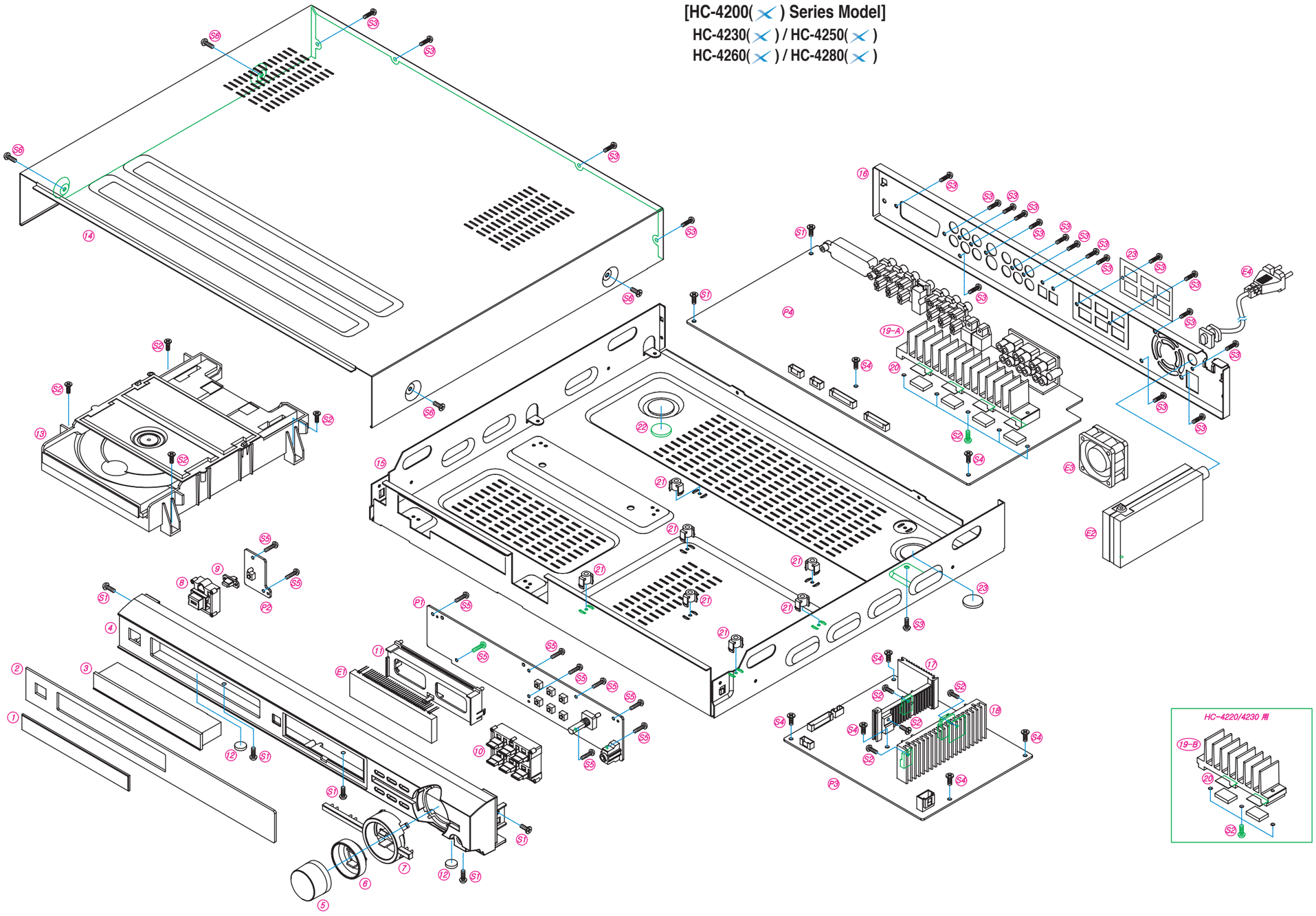
NO	PARTS NAME	CODE NO.	DESCRIPTIONS	Q'TY	REMARKS
1	WINDOW DOOR	9CD1621100	HALF-MIRROR T2.0	1	
2	DOOR DVD	9CD1814300	HIPS, SPRAY	1	
3	WINDOW FRONT A/B	9CD16210A0/B0	HALF-MIRROR T2.0	各1	
4	PANEL FRONT	9CD0312400	HIPS,SPRAY	1	
5	KNOB VOLUME	9CD1351200	ABS.CR COATING	1	ELECTRO FORMING
6	DECO VOLUME	9CD1005600	ACRYL,MILKY	1	
7	BRKT PCB L/R	9CD24162L0/R0	MIPS	各1	
8	KNOB POWER	9CD1351300	ABS.CR COATING	1	
9	LENS POWER	9CD1621300	ACRYL,MILKY	1	
10	KNOB FUNCTION	9CD1351100	ABS.CR COATING	1	
11	GUIDE FLT	9CD2507600	MIPS	1	DHC-X100 共用
12	CUSHION FOOT	9CD4209000	URETHAN RUBBER D10*4.0	2	DHC-X100 共用
13	DECK MECHA DVD	9CD6012000	RAYMEDIA (RL-S2003)	1	(W/O DECK PCB)
14	CHASSIS TOP	9CD0610100	SECC T0.7	1	
15	CHASSIS BOTTOM	9CD0610200	SECC T1.0	1	
16	CHASSIS BACK	9CD0610300	SECC T0.8	1	
17	HEATSINK DIODE	9CD4407300	AL-EXTRUSION	1	DHC-XD500 共用
18	HEATSINK FET	9CD4407400	AL-EXTRUSION	1	DHC-XD500 共用
19-A	HEATSINK IC	9CD4408400	AL-EXTRUSION	1	HC-4150/60/80
19-B	HEATSINK IC	9CD4408900	AL-EXTRUSION	1	HC-4120/30
20	RUBBER SILICON	9CD4209100	RUBBER	4	DHC-XD500 共用
21	SUPPORT PCB 08	9CD2507400	HIPS H=8	7	DHC-XD500 共用
22	CUSHION FOOT	9CD4207700	URETHAN RUBBER D12*4.0	2	DHC-X100 共用
23	PLATE SPEAKER	9CD0913500	PC SHEET T0.3	1	

NO	PARTS NAME	CODE NO.	DESCRIPTIONS	Q'TY	REMARKS
S1	SCREW TAPTITE	7173300812	TT2 BIN 3*8 MFZN	7	
S2	SCREW TAPTITE	7173301011	TT2 BIN 3*10 MFZN	13	
S3	SCREW TAPTITE	7173301012	TT2 BIN 3*10 MFZN BK	21	
S4	SCREW TAPTITE	7173301412	TT2 BIN 3*14 BK	7	
S5	SCREW TAPTITE	7173261011	TT2BIN 2.6*10 MFZN	8	
S6	SCREW TAPTITE	7173300813	TT2 BIN 3*8 MFZN CR	4	
P1	PCB FRONT	9CD6592300		1	
P2	PCB TOP	9CD6592400		1	
P3	PCB POWER	9CD6592401		1	
P4	PCB SMPS	9CD6592800		1	
P5	PCB MAIN	9CD6592700		1	
E1	FLT			1	
E2	TUNER MODULE			1	
E3	DC FAN			1	
E4	CORD AC			1	

14. Exploded View and Mechanical Parts List

• HC-4200(✕) Series Only

[HC-4200(✕) Series Model]
HC-4230(✕) / HC-4250(✕)
HC-4260(✕) / HC-4280(✕)



14. Exploded View and Mechanical Parts List

• HC-4200( ) Series Only

NO	PARTS NAME	CODE NO.	DESCRIPTIONS	Q'TY	REMARKS
1	WINDOW DOOR	9CD1621100	HALF-MIRROR T2.0	1	HC-4150 共用
2	WINDOW FRONT	9CD1621200	HALF-MIRROR T2.0	1	
3	DOOR DVD	9CD1814400	HIPS, SPRAY	1	
4	PANEL FRONT	9CD0312500	HIPS,SPRAY	1	
5	KNOB VOLUME	9CD1351500	ABS.CR COATING	1	ELECTRO FORMING
6	DECO VOLUME	9CD1005700	ACRYL,MILKY	1	
7	DECO FRONT	9CD1005800	ABS.CR COATING	1	
8	KNOB POWER	9CD1351600	ABS.CR COATING	1	
9	LENS POWER	9CD1621400	ACRYL,MILKY	1	
10	KNOB FUNCTION	9CD1351400	ABS.CR COATING	1	
11	GUIDE FLT	9CD2507700	MIPS	1	DHC-X150 共用
12	CUSHION FOOT	9CD4209000	URETHAN RUBBER D10*4.0	2	DHC-X150 共用
13	DECK MECHA DVD	9CD6012000	RAYMEDIA (RL-S2003)	1	(W/O DECK PCB)
14	COVER TOP	9CD0610100	SECC T0.7	1	HC-4150 共用
15	CHASSIS BOTTOM	9CD0610200	SECC T1.0	1	HC-4150 共用
16	COVER BACK	9CD0610300	SECC T0.8	1	HC-4150 共用
17	HEATSINK DIODE	9CD4407300	AL-EXTRUSION	1	DHC-XD500 共用
18	HEATSINK FET	9CD4407400	AL-EXTRUSION	1	DHC-XD500 共用
19-A	HEATSINK IC	9CD4408400	AL-EXTRUSION	1	HC-4250/60/80
19-B	HEATSINK IC	9CD4408900	AL-EXTRUSION	1	HC-4220/30
20	RUBBER SILICON	9CD4209100	RUBBER	4	DHC-XD500 共用
21	SUPPORT PCB 08	9CD2507400	HIPS H=8	7	DHC-XD500 共用
22	CUSHION FOOT	9CD4207700	URETHAN RUBBER D12*4.0	2	DHC-X150 共用
23	PLATE SPEAKER	9CD0913500	PC SHEET T0.3	1	HC-4150 共用

NO	PARTS NAME	CODE NO.	DESCRIPTIONS	Q'TY	REMARKS
S1	SCREW TAPTITE	7173300812	TT2 BIN 3*8 MFZN	7	
S2	SCREW TAPTITE	7173301011	TT2 BIN 3*10 MFZN	13	
S3	SCREW TAPTITE	7173301012	TT2 BIN 3*10 MFZN BK	17	
S4	SCREW TAPTITE	7173301412	TT2 BIN 3*14 BK	7	
S5	SCREW TAPTITE	7173261011	TT2BIN 2.6*10 MFZN	10	
S6	SCREW TAPTITE	7173300813	TT2 BIN 3*8 CR	4	
P1	PCB FRONT	9CD6592600		1	
P2	PCB POWER	9CD6592601		1	
P3	PCB SMPS	9CD6592800		1	
P4	PCB MAIN	9CD6592700		1	
E1	FLT			1	
E2	TUNER MODULE			1	
E3	DC FAN			1	
E4	CORD AC			1	

Electrical Part List

PCB MAIN ASS'y [9CDC071100] : HC-4150

Loc.	Part Code	Part Name	Description	Remark
B001	9CD6592700	PCB MAIN	344 X 160 1.6T FR-4	
BD801	5LX100J001	COIL BEAD	3.6PI X 6MM 100 OHM,100MHz	
BD802	5LX100J001	COIL BEAD	3.6PI X 6MM 100 OHM,100MHz	
CE201	CEXF1H220V	C ELECTRO	50V RSS 22MF (5X11)	
CE202	CEXF1E470V	C ELECTRO	25V RSS 47MF (5X11) TP	
CE203	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP	
CE302	CEXFOJ101V	C ELECTRO	6.3V RSS 100MF (5X11) TP	
CE303	CEXFOJ221V	C ELECTRO	6.3V RSS 220MF (5X11) TP	
CE304	CEXFOJ101V	C ELECTRO	6.3V RSS 100MF (5X11) TP	
CE305	CEXFOJ101V	C ELECTRO	6.3V RSS 100MF (5X11) TP	
CE306	CEXFOJ221V	C ELECTRO	6.3V RSS 220MF (5X11) TP	
CE401	CEXF1H109V	C ELECTRO	50V RSS 1MF (5X11) TP	
CE402	CEXF1H109V	C ELECTRO	50V RSS 1MF (5X11) TP	
CE403	CEXF1H109V	C ELECTRO	50V RSS 1MF (5X11) TP	
CE404	CEXF1H109V	C ELECTRO	50V RSS 1MF (5X11) TP	
CE405	CEXF1H109V	C ELECTRO	50V RSS 1MF (5X11) TP	
CE406	CEXF1H109V	C ELECTRO	50V RSS 1MF (5X11) TP	
CE407	CEXF1H108V	C ELECTRO	50V RSS 0.1MF (5X11) TP	
CE409	CEXF1H479V	C ELECTRO	50V RSS 4.7MF (5X11) TP	
CE410	CEXF1H479V	C ELECTRO	50V RSS 4.7MF (5X11) TP	
CE411	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP	
CE412	CEXF1H229V	C ELECTRO	50V RSS 2.2MF (5X11) TP	
CE413	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP	
CE414	CEXF1E470V	C ELECTRO	25V RSS 47MF (5X11) TP	
CE415	CEXF1H479V	C ELECTRO	50V RSS 4.7MF (5X11) TP	
CE416	CEXF1H479V	C ELECTRO	50V RSS 4.7MF (5X11) TP	
CE417	CEXF1H479V	C ELECTRO	50V RSS 4.7MF (5X11) TP	
CE418	CEXF1H479V	C ELECTRO	50V RSS 4.7MF (5X11) TP	
CE419	CEXF1E470V	C ELECTRO	25V RSS 47MF (5X11) TP	
CE420	CEXF1E470V	C ELECTRO	25V RSS 47MF (5X11) TP	
CE421	CEXF1E470V	C ELECTRO	25V RSS 47MF (5X11) TP	
CE422	CEXF1E470V	C ELECTRO	25V RSS 47MF (5X11) TP	
CE423	CEXF1E470V	C ELECTRO	25V RSS 47MF (5X11) TP	
CE424	CEXF1E470V	C ELECTRO	25V RSS 47MF (5X11) TP	
CE426	CEXF1H109V	C ELECTRO	50V RSS 1MF (5X11) TP	
CE427	CEXF1H339V	C ELECTRO	50V RSS 3.3MF (5X11) TP	
CE428	CEXF1H339V	C ELECTRO	50V RSS 3.3MF (5X11) TP	
CE429	CEXF1H339V	C ELECTRO	50V RSS 3.3MF (5X11) TP	
CE430	CEXF1H339V	C ELECTRO	50V RSS 3.3MF (5X11) TP	
CE431	CEXF1H339V	C ELECTRO	50V RSS 3.3MF (5X11) TP	
CE432	CEXF1H339V	C ELECTRO	50V RSS 3.3MF (5X11) TP	
CE433	CEXF1H339V	C ELECTRO	50V RSS 3.3MF (5X11) TP	
CE434	CEXF1E470V	C ELECTRO	25V RSS 47MF (5X11) TP	
CE435	CEXF1E470V	C ELECTRO	25V RSS 47MF (5X11) TP	
CE436	CEXF1E470V	C ELECTRO	25V RSS 47MF (5X11) TP	
CE437	CEXF1H479V	C ELECTRO	50V RSS 4.7MF (5X11) TP	
CE438	CEXF1H479V	C ELECTRO	50V RSS 4.7MF (5X11) TP	
CE439	CEXF1H479V	C ELECTRO	50V RSS 4.7MF (5X11) TP	
CE440	CEXF1H479V	C ELECTRO	50V RSS 4.7MF (5X11) TP	
CE441	CEXF1H479V	C ELECTRO	50V RSS 4.7MF (5X11) TP	
CE442	CEXF1H479V	C ELECTRO	50V RSS 4.7MF (5X11) TP	
CE443	CEXF1E470V	C ELECTRO	25V RSS 47MF (5X11) TP	
CE444	CEXF1E470V	C ELECTRO	25V RSS 47MF (5X11) TP	
CE445	CEXF1H479V	C ELECTRO	50V RSS 4.7MF (5X11) TP	
CE446	CEXF1E470V	C ELECTRO	25V RSS 47MF (5X11) TP	
CE447	CEXF1E470V	C ELECTRO	25V RSS 47MF (5X11) TP	
CE448	CEXF1H479V	C ELECTRO	50V RSS 4.7MF (5X11) TP	
CE501	CEXFOJ221V	C ELECTRO	6.3V RSS 220MF (5X11) TP	
CE502	CEXFOJ101V	C ELECTRO	6.3V RSS 100MF (5X11) TP	
CE503	CEXF1H479V	C ELECTRO	50V RSS 4.7MF (5X11) TP	
CE504	CEXFOJ221V	C ELECTRO	6.3V RSS 220MF (5X11) TP	
CE505	CEXFOJ221V	C ELECTRO	6.3V RSS 220MF (5X11) TP	
CE506	CEXFOJ221V	C ELECTRO	6.3V RSS 220MF (5X11) TP	
CE508	CEXFOJ101V	C ELECTRO	6.3V RSS 100MF (5X11) TP	
CE509	CEXFOJ101V	C ELECTRO	6.3V RSS 100MF (5X11) TP	
CE601	CEXF1C101V	C ELECTRO	16V RSS 100MF (5X11) TP	
CE602	CEXF1H220V	C ELECTRO	50V RSS 22MF	
CE603	CEXF1C101V	C ELECTRO	16V RSS 100MF (5X11) TP	
CE604	CEXF1H220V	C ELECTRO	50V RSS 22MF	
CE605	CEXF1C101V	C ELECTRO	16V RSS 100MF (5X11) TP	

Electrical Part List

Loc.	Part Code	Part Name	Description	Remark
CE606	CEXF1H220V	C ELECTRO	50V RSS 22MF	
CE607	CEXF1E470V	C ELECTRO	25V RSS 47MF (5X11) TP	
CE608	CEXF1C102V	C ELECTRO	16V RSS 1000MF (5X11) TP	
CE609	CEXF1C101V	C ELECTRO	16V RSS 100MF (5X11) TP	
CE610	CEXF1C101V	C ELECTRO	16V RSS 100MF (5X11) TP	
CE611	CEXF1C221V	C ELECTRO	16V RSS 220MF	
CE612	CEXF1C221V	C ELECTRO	16V RSS 220MF	
CE613	CEXF1C221V	C ELECTRO	16V RSS 220MF	
CE807	CEXF1V102V	C ELECTRO	35V RSS 1000MF (13X25)	
CE808	CEXF1V102V	C ELECTRO	35V RSS 1000MF (13X25)	
CE812	CEXF1V102V	C ELECTRO	35V RSS 1000MF (13X25)	
CE813	CEXF1V102V	C ELECTRO	35V RSS 1000MF (13X25)	
CF401	5P1H101MF-	LC FILTER	CFI 06B 1H 101MF	
CF402	5P1H101MF-	LC FILTER	CFI 06B 1H 101MF	
CF403	5P1H101MF-	LC FILTER	CFI 06B 1H 101MF	
CF404	5P1H101MF-	LC FILTER	CFI 06B 1H 101MF	
CF405	5P1H101MF-	LC FILTER	CFI 06B 1H 101MF	
CF406	5P1H101MF-	LC FILTER	CFI 06B 1H 101MF	
CF407	5P1H101MF-	LC FILTER	CFI 06B 1H 101MF	
CF601	5P1H101MF-	LC FILTER	CFI 06B 1H 101MF	
CF602	5P1H101MF-	LC FILTER	CFI 06B 1H 101MF	
CF603	5P1H101MF-	LC FILTER	CFI 06B 1H 101MF	
CF604	5P1H101MF-	LC FILTER	CFI 06B 1H 101MF	
CF605	5P1H101MF-	LC FILTER	CFI 06B 1H 101MF	
CF606	5P1H101MF-	LC FILTER	CFI 06B 1H 101MF	
CF607	5P1H101MF-	LC FILTER	CFI 06B 1H 101MF	
CF608	5P1H101MF-	LC FILTER	CFI 06B 1H 101MF	
CF609	5P1H101MF-	LC FILTER	CFI 06B 1H 101MF	
CF610	5P1H101MF-	LC FILTER	CFI 06B 1H 101MF	
CF611	5P1H101MF-	LC FILTER	CFI 06B 1H 101MF	
CF612	5P1H101MF-	LC FILTER	CFI 06B 1H 101MF	
CF613	5P1H101MF-	LC FILTER	CFI 06B 1H 101MF	
CM801	CMXK1J684J	C MYLAR	MC 63V 0.68MF J	
CM802	CMXK1J684J	C MYLAR	MC 63V 0.68MF J	
CM803	CMXK1J684J	C MYLAR	MC 63V 0.68MF J	
CM804	CMXK1J684J	C MYLAR	MC 63V 0.68MF J	
CM805	CMXK1J684J	C MYLAR	MC 63V 0.68MF J	
CM806	CMXK1J105J	C MYLAR	MC 63V 1MF J	
CM807	CMXK1J224J	C MYLAR	MC 63V 0.22MF J	
CM808	CMXK1J224J	C MYLAR	MC 63V 0.22MF J	
CN101	9728823200	CONN FFC	FFC Pitch1.25mm 13P 150mm D type	
CW101	9CD6264500	CONN WAFER	52045-1345	
CW201	2503-WS-02	CONN WAFER	2P 2.5MM	With DC Fan
CW301	9CD6273500	CONN WAFER	52559-2492	
CW302	2001-WS-05	CONN WAFER	5P 2.0MM	
CW303	2001-WS-06	CONN WAFER	6P 2.0MM	
CW701	2001-WS-13	CONN WAFER	13P 2.0MM	
CW892	2001-WS-04	CONN WAFER	4P 2.0MM	
CW893	2001-WS-12	CONN WAFER	12P 2.0MM	
FN201	9738101600	DC FAN	SP402012L	With DC Fan
HA201	HRTT8103J	R ARRAY CHIP	1/10 10KX4 OHM 1608	
HA401	HRTT8101J	R ARRAY CHIP	1/10 100X4 OHM 1608	
HA402	HRTT8220J	R ARRAY CHIP	1/10 22X4 OHM 1608	
HA403	HRTT8220J	R ARRAY CHIP	1/10 22X4 OHM 1608	With Digital Audio Input
HA404	HRTT8220J	R ARRAY CHIP	1/10 22X4 OHM 1608	With Digital Audio Input
HA501	HRTT8100J	R ARRAY CHIP	1/10 10X4 OHM 1608	
HA502	HRTT8100J	R ARRAY CHIP	1/10 10X4 OHM 1608	
HA503	HRTT8100J	R ARRAY CHIP	1/10 10X4 OHM 1608	
HA504	HRTT8330J	R ARRAY CHIP	1/10 33X4 OHM 1608	
HA505	HRTT8330J	R ARRAY CHIP	1/10 33X4 OHM 1608	
HA506	HRTT8330J	R ARRAY CHIP	1/10 33X4 OHM 1608	
HA507	HRTT8100J	R ARRAY CHIP	1/10 10X4 OHM 1608	
HA508	HRTT8100J	R ARRAY CHIP	1/10 10X4 OHM 1608	
HA509	HRTT8100J	R ARRAY CHIP	1/10 10X4 OHM 1608	
HA510	HRTT8100J	R ARRAY CHIP	1/10 10X4 OHM 1608	
HA511	HRTT8332J	R ARRAY CHIP	1/10 3.3kX4 OHM 1608	
HC201	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC203	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC205	HCBK102KBA	C CHIP CERA	50V X7R 1000PF K 1608	
HC206	HCQK221JBA	C CHIP CERA	50V CH 220PF J 1608	
HC207	HCBK122KBA	C CHIP CERA	50V X7R 1200PF K 1608	

Electrical Part List

Loc.	Part Code	Part Name	Description	Remark
HC211	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC212	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC213	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC214	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC216	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC219	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC221	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC222	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC223	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC224	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC225	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC226	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC227	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC228	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC231	HCQK101JBA	C CHIP CERA	50V CH 100PF J 1608	
HC232	HCQK101JBA	C CHIP CERA	50V CH 100PF J 1608	
HC233	HCQK101JBA	C CHIP CERA	50V CH 100PF J 1608	
HC234	HCQK101JBA	C CHIP CERA	50V CH 100PF J 1608	
HC235	HCQK101JBA	C CHIP CERA	50V CH 100PF J 1608	
HC236	HCQK101JBA	C CHIP CERA	50V CH 100PF J 1608	
HC238	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC239	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC301	HCQK222JBA	C CHIP CERA	50V CH 2200PF J 1608	
HC302	HCQK222JBA	C CHIP CERA	50V CH 2200PF J 1608	
HC303	HCQK222JBA	C CHIP CERA	50V CH 2200PF J 1608	
HC304	HCQK222JBA	C CHIP CERA	50V CH 2200PF J 1608	
HC305	HCQK121JBA	C CHIP CERA	50V CH 120PF J 1608	
HC307	HCQK681JBA	C CHIP CERA	50V CH 680PF J 1608	
HC308	HCBK103KBA	C CHIP CERA	50V X7R 0.01MF Z 1608	
HC309	HCBK103KBA	C CHIP CERA	50V X7R 0.01MF Z 1608	
HC310	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC311	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC312	HCQK471JBA	C CHIP CERA	50V CH 470PF J 1608	
HC313	HCQK471JBA	C CHIP CERA	50V CH 470PF J 1608	
HC314	HCBK103KBA	C CHIP CERA	50V X7R 0.01MF M 1608	
HC315	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC316	HCBK473KBA	C CHIP CERA	50V X7R 0.047MF M 1608	
HC317	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC318	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC319	HCBK224KBA	C CHIP CERA	50V X7R 0.22MF Z 1608	
HC320	HCQK161JBA	C CHIP CERA	50C CH 160PF J 1608	
HC321	HCBK333KBA	C CHIP CERA	50V X7R 0.033MF M 1608	
HC322	HCBK103KBA	C CHIP CERA	50V X7R 0.01MF M 1608	
HC323	HCQK101JBA	C CHIP CERA	50V CH 100PF J 1608	
HC324	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC325	HCBK472KBA	C CHIP CERA	50V X7R 4700PF K 1608	
HC326	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC329	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC330	HCQK101JBA	C CHIP CERA	50V CH 100PF J 1608	
HC331	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC332	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC333	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC334	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC338	HCBK102KBA	C CHIP CERA	50V X7R 1000PF K 1608	
HC339	HCBK102KBA	C CHIP CERA	50V X7R 1000PF K 1608	
HC341	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC342	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC401	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC402	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC403	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC404	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC410	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC411	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC412	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC413	HCQK221JBA	C CHIP CERA	50V CH 220PF J 1608	
HC414	HCQK221JBA	C CHIP CERA	50V CH 220PF J 1608	
HC415	HCQK220JBA	C CHIP CERA	50V CH 22PF J 1608	
HC416	HCQK220JBA	C CHIP CERA	50V CH 22PF J 1608	
HC417	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC420	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC421	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	

Electrical Part List

Loc.	Part Code	Part Name	Description	Remark
HC422	HCQK220JBA	C CHIP CERA	50V CH 22PF J 1608	
HC423	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC424	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC425	HCQK200JBA	C CHIP CERA	50V CH 20PF J 1608	
HC426	HCQK200JBA	C CHIP CERA	50V CH 20PF J 1608	
HC427	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC430	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC431	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC432	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC433	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC434	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC435	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC436	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC437	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC438	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC439	HCQK221JBA	C CHIP CERA	50V CH 220PF J 1608	
HC440	HCQK221JBA	C CHIP CERA	50V CH 220PF J 1608	
HC441	HCQK561JBA	C CHIP CERA	50V CH 560PF J 1608	
HC442	HCQK561JBA	C CHIP CERA	50V CH 560PF J 1608	
HC443	HCQK561JBA	C CHIP CERA	50V CH 560PF J 1608	
HC444	HCQK561JBA	C CHIP CERA	50V CH 560PF J 1608	
HC445	HCQK561JBA	C CHIP CERA	50V CH 560PF J 1608	
HC447	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC448	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC449	HCQK221JBA	C CHIP CERA	50V CH 220PF J 1608	
HC450	HCQK221JBA	C CHIP CERA	50V CH 220PF J 1608	
HC451	HCQK221JBA	C CHIP CERA	50V CH 220PF J 1608	
HC452	HCQK221JBA	C CHIP CERA	50V CH 220PF J 1608	
HC453	HCQK221JBA	C CHIP CERA	50V CH 220PF J 1608	
HC454	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC456	HCQK221JBA	C CHIP CERA	50V CH 220PF J 1608	
HC457	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC501	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC502	HCQK200JBA	C CHIP CERA	50V CH 20PF J 1608	
HC503	HCQK200JBA	C CHIP CERA	50V CH 20PF J 1608	
HC504	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC505	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC506	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC507	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC508	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC509	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC510	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC511	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC512	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC513	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC514	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC515	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC516	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC517	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC518	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC519	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC520	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC521	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC522	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC523	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC524	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC525	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC526	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC527	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC528	HCBK272KBA	C CHIP CERA	50V X7R 2700PF K 1608	
HC529	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC530	HCQK330JBA	C CHIP CERA	50V CH 33PF J 1608	
HC531	HCQK330JBA	C CHIP CERA	50V CH 33PF J 1608	
HC532	HCQK330JBA	C CHIP CERA	50V CH 33PF J 1608	
HC533	HCBK153KBA	C CHIP CERA	50V X7R 0.015MF K 1608	
HC534	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC535	HCQK561JBA	C CHIP CERA	50V CH 560PF J 1608	
HC536	HCBK153KBA	C CHIP CERA	50V X7R 0.015MF K 1608	
HC537	HCQK561JBA	C CHIP CERA	50V CH 560PF J 1608	
HC538	HCBK153KBA	C CHIP CERA	50V X7R 0.015MF K 1608	
HC539	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	

Electrical Part List

Loc.	Part Code	Part Name	Description	Remark
HC540	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC541	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC542	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC543	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC544	HCQK470JBA	C CHIP CERA	50V CH 47PF J 1608	
HC545	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC546	HCQK561JBA	C CHIP CERA	50V CH 560PF J 1608	
HC547	HCBK473KBA	C CHIP CERA	50V X7R 0.047MF M 1608	
HC550	HCBK682KBA	C CHIP CERA	50V X7R 6800PF K 1608	
HC552	HCBK472KBA	C CHIP CERA	50V X7R 4700PF K 1608	
HC555	HCBK472KBA	C CHIP CERA	50V X7R 4700PF K 1608	
HC556	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC557	HCBK105KBA	C CHIP CERA	50V X7R 1MF K 1608	
HC558	HCBK105KBA	C CHIP CERA	50V X7R 1MF K 1608	
HC559	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC560	HCBK105KBA	C CHIP CERA	50V X7R 1MF K 1608	
HC561	HCBK102KBA	C CHIP CERA	50V X7R 1000PF K 1608	
HC562	HCBK102KBA	C CHIP CERA	50V X7R 1000PF K 1608	
HC563	HCBK102KBA	C CHIP CERA	50V X7R 1000PF K 1608	
HC564	HCBK102KBA	C CHIP CERA	50V X7R 1000PF K 1608	
HC565	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC566	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC567	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC568	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC569	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC570	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC571	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC572	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC573	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC575	HRF8000-CA	R CHIP	1/8 0 OHM J 2012	
HC577	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC601	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC605	HCQK151JBA	C CHIP CERA	50V CH 150PF J 1608	
HC606	HCQK151JBA	C CHIP CERA	50V CH 150PF J 1608	
HC607	HCQK151JBA	C CHIP CERA	50V CH 150PF J 1608	
HC608	HCQK220JBA	C CHIP CERA	50V CH 22PF J 1608	
HC609	HCQK100JBA	C CHIP CERA	50V CH 10PF J 1608	
HC610	HCQK100JBA	C CHIP CERA	50V CH 10PF J 1608	
HC611	HCQK220JBA	C CHIP CERA	50V CH 22PF J 1608	
HC612	HCQK151JBA	C CHIP CERA	50V CH 150PF J 1608	
HC614	HCQK131JBA	C CHIP CERA	50V CH 130PF J 1608	
HC615	HCQK131JBA	C CHIP CERA	50V CH 130PF J 1608	
HC616	HCQK131JBA	C CHIP CERA	50V CH 130PF J 1608	
HC617	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC618	HCQK131JBA	C CHIP CERA	50V CH 130PF J 1608	
HC801	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC802	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC803	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC804	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC805	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC806	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC807	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC808	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC809	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC810	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC811	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC812	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC813	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC814	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC815	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC816	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC817	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC818	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC819	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC820	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC821	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC822	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC823	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC824	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC825	HCBK105KCA	C CHIP CERA	50V X7R 1MF K 2012	
HC826	HCBK105KCA	C CHIP CERA	50V X7R 1MF K 2012	

Electrical Part List

Loc.	Part Code	Part Name	Description	Remark
HC827	HCBK105KCA	C CHIP CERA	50V X7R 1MF K 2012	
HC828	HCBK105KCA	C CHIP CERA	50V X7R 1MF K 2012	
HC829	HCBK105KCA	C CHIP CERA	50V X7R 1MF K 2012	
HC830	HCBK105KCA	C CHIP CERA	50V X7R 1MF K 2012	
HC831	HCBK105KCA	C CHIP CERA	50V X7R 1MF K 2012	
HC832	HCBK105KCA	C CHIP CERA	50V X7R 1MF K 2012	
HC833	HCQK331JCA	C CHIP CERA	50V CH 330PF J 2012	
HC834	HCQK331JCA	C CHIP CERA	50V CH 330PF J 2012	
HC835	HCQK331JCA	C CHIP CERA	50V CH 330PF J 2012	
HC836	HCQK331JCA	C CHIP CERA	50V CH 330PF J 2012	
HC837	HCQK331JCA	C CHIP CERA	50V CH 330PF J 2012	
HC838	HCQK681JCA	C CHIP CERA	50V CH 680PF J 2012	
HC839	HCBK154KCA	C CHIP CERA	50V X7R 0.15MF K 2012	
HC840	HCBK154KCA	C CHIP CERA	50V X7R 0.15MF K 2012	
HC841	HCBK154KCA	C CHIP CERA	50V X7R 0.15MF K 2012	
HC842	HCBK154KCA	C CHIP CERA	50V X7R 0.15MF K 2012	
HC843	HCBK154KCA	C CHIP CERA	50V X7R 0.15MF K 2012	
HC844	HCBK154KCA	C CHIP CERA	50V X7R 0.15MF K 2012	
HC845	HCBK224KCA	C CHIP CERA	50V X7R 0.22MF K 2012	
HC846	HCBK224KCA	C CHIP CERA	50V X7R 0.22MF K 2012	
HC847	HCBK154KCA	C CHIP CERA	50V X7R 0.15MF K 2012	
HC848	HCBK154KCA	C CHIP CERA	50V X7R 0.15MF K 2012	
HC849	HCBK154KCA	C CHIP CERA	50V X7R 0.15MF K 2012	
HC850	HCBK154KCA	C CHIP CERA	50V X7R 0.15MF K 2012	
HC851	HCBK154KCA	C CHIP CERA	50V X7R 0.15MF K 2012	
HC852	HCBK154KCA	C CHIP CERA	50V X7R 0.15MF K 2012	
HC853	HCBK154KCA	C CHIP CERA	50V X7R 0.15MF K 2012	
HC854	HCBK154KCA	C CHIP CERA	50V X7R 0.15MF K 2012	
HC855	HCBK154KCA	C CHIP CERA	50V X7R 0.15MF K 2012	
HC856	HCBK154KCA	C CHIP CERA	50V X7R 0.15MF K 2012	
HC857	HCBK154KCA	C CHIP CERA	50V X7R 0.15MF K 2012	
HC858	HCBK154KCA	C CHIP CERA	50V X7R 0.15MF K 2012	
HC859	HCBK154KCA	C CHIP CERA	50V X7R 0.15MF K 2012	
HC860	HCBK154KCA	C CHIP CERA	50V X7R 0.15MF K 2012	
HC861	HCBK682KBA	C CHIP CERA	50V X7R 6800PF K 1608	
HC862	HCBK682KBA	C CHIP CERA	50V X7R 6800PF K 1608	
HC863	HCBK682KBA	C CHIP CERA	50V X7R 6800PF K 1608	
HC864	HCBK682KBA	C CHIP CERA	50V X7R 6800PF K 1608	
HC865	HCBK682KBA	C CHIP CERA	50V X7R 6800PF K 1608	
HC866	HCBK682KBA	C CHIP CERA	50V X7R 6800PF K 1608	
HC867	HCBK682KBA	C CHIP CERA	50V X7R 6800PF K 1608	
HC868	HCBK682KBA	C CHIP CERA	50V X7R 6800PF K 1608	
HC869	HCBK682KBA	C CHIP CERA	50V X7R 6800PF K 1608	
HC870	HCBK682KBA	C CHIP CERA	50V X7R 6800PF K 1608	
HC871	HCBK682KBA	C CHIP CERA	50V X7R 6800PF K 1608	
HC872	HCBK682KBA	C CHIP CERA	50V X7R 6800PF K 1608	
HD301	DZDS160---	DIODE SW CHIP	KDS160	
HD302	DZDS160---	DIODE SW CHIP	KDS160	
HD303	DZDS160---	DIODE SW CHIP	KDS160	
HD304	DZDS160---	DIODE SW CHIP	KDS160	
HD305	DZDS160---	DIODE SW CHIP	KDS160	
HD501	D1SR156---	DIODE SW CHIP	1SR156-400 TE25	
HD502	D1SR156---	DIODE SW CHIP	1SR156-400 TE25	
HD601	DZDS160---	DIODE SW CHIP	KDS160	
HD602	DZDS160---	DIODE SW CHIP	KDS160	
HL201	5LX601K843	CHIP BEAD	FB 600 OHM 100MHZ 2012	
HL202	5LX601K843	CHIP BEAD	FB 600 OHM 100MHZ 2012	
HL301	5LX600K841	CHIP BEAD	FB 60 OHM 100MHZ 2012	
HL303	5LX600K841	CHIP BEAD	FB 60 OHM 100MHZ 2012	
HL304	HLC399J03A	CHIP COIL	3.9UH	
HL305	HLC399J03A	CHIP COIL	3.9UH	
HL402	HLC479J03A	CHIP COIL	4.7UH CHIP 2012	
HL403	HLC479J03A	CHIP COIL	4.7UH CHIP 2012	
HL404	5LX600K841	CHIP BEAD	FB 60 OHM 100MHZ 2012	
HL405	5LX600K841	CHIP BEAD	FB 60 OHM 100MHZ 2012	
HL407	5LX600K841	CHIP BEAD	FB 60 OHM 100MHZ 2012	
HL408	5LX600K841	CHIP BEAD	FB 60 OHM 100MHZ 2012	
HL409	5LX600K841	CHIP BEAD	FB 60 OHM 100MHZ 2012	
HL501	5LX600K841	CHIP BEAD	FB 60 OHM 100MHZ 2012	
HL502	5LX600K841	CHIP BEAD	FB 60 OHM 100MHZ 2012	
HL503	5LX600K841	CHIP BEAD	FB 60 OHM 100MHZ 2012	

Electrical Part List

Loc.	Part Code	Part Name	Description	Remark
HL505	5LX600K841	CHIP BEAD	FB 60 OHM 100MHZ 2012	
HL506	5LX600K841	CHIP BEAD	FB 60 OHM 100MHZ 2012	
HL507	5LX600K841	CHIP BEAD	FB 60 OHM 100MHZ 2012	
HL508	5LX600K841	CHIP BEAD	FB 60 OHM 100MHZ 2012	
HL601	5LX600K841	CHIP BEAD	FB 60 OHM 100MHZ 2012	
HL603	HRF8000-CA	R CHIP	1/8 0 OHM J 2012	
HL604	HRF8000-CA	R CHIP	1/8 0 OHM J 2012	
HL605	HRF8000-CA	R CHIP	1/8 0 OHM J 2012	
HL606	5LF229K840	CHIP COIL	2.2UH	
HL607	5LF228K844	CHIP COIL	0.22UH	
HL608	5LF109K847	CHIP COIL	1UH	
HL609	5LF229K840	CHIP COIL	2.2UH	
HL610	HRF8000-CA	R CHIP	1/8 0 OHM J 2012	
HL801	5LX600K841	CHIP BEAD	FB 60 OHM 100MHZ 2012	
HL802	5LX600K841	CHIP BEAD	FB 60 OHM 100MHZ 2012	
HL803	5LX600K841	CHIP BEAD	FB 60 OHM 100MHZ 2012	
HL804	5LX600K841	CHIP BEAD	FB 60 OHM 100MHZ 2012	
HQ201	TZRA111S--	TR CHIP	KRA111S	
HQ202	TZRC231S--	TR CHIP	KRC231S	
HQ203	TZRC231S--	TR CHIP	KRC231S	
HQ204	TZRC231S--	TR CHIP	KRC231S	
HQ205	TZRC231S--	TR CHIP	KRC231S	With DC Fan
HQ206	TZRA107S--	TR CHIP	KRA107S	With DC Fan
HQ301	T2SB1132T1	TR CHIP	TR, 2SB1132,SOT89EBC	
HQ302	T2SB1132T1	TR CHIP	TR, 2SB1132,SOT89EBC	
HQ303	TZRC111S--	TR CHIP	KRC111S	
HQ304	T2SK2731T1	FET	TR, 2SK2731(30V,0.1A),FET	
HQ305	T2SK2731T1	FET	TR, 2SK2731(30V,0.1A),FET	
HQ401	TZRA107S--	TR CHIP	KRA107S	
HQ402	TZRC231S--	TR CHIP	KRC231S	
HQ403	TZRC231S--	TR CHIP	KRC231S	
HQ404	TZRA107S--	TR CHIP	KRA107S	
HQ405	TZRC231S--	TR CHIP	KRC231S	
HQ601	TZRC107S--	TR CHIP	KRC107S	
HQ602	TZRC107S--	TR CHIP	KRC107S	
HQ603	TZTC3875S-	TR CHIP	KTC3875S	
HQ604	TZTC3875S-	TR CHIP	KTC3875S	
HQ605	TZTC3875S-	TR CHIP	KTC3875S	
HQ606	TZRC107S--	TR CHIP	KRC107S	
HQ607	TZRA107S--	TR CHIP	KRA107S	
HR201	HRFT682JBA	R CHIP	1/10 6.8K OHM J 1608	
HR202	HRFT682JBA	R CHIP	1/10 6.8K OHM J 1608	
HR203	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
HR204	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
HR205	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
HR206	HRFT000-BA	R CHIP	1/10 0 OHM J 1608	
HR207	HRFT000-BA	R CHIP	1/10 0 OHM J 1608	
HR210	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
HR211	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
HR212	HRFT102JBA	R CHIP	1/10 1K OHM J 1608	
HR213	HRF8100JCA	R CHIP	1/8 10 OHM J 2012	With DC Fan
HR232	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
HR233	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
HR234	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
HR235	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
HR236	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
HR237	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
HR239	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
HR240	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
HR301	HRFT123JBA	R CHIP	1/10 12K OHM J 1608	
HR302	HRFT123JBA	R CHIP	1/10 12K OHM J 1608	
HR304	HRFT123FBA	R CHIP	1/10 12K OHM F 1608	
HR306	HRFT333JBA	R CHIP	1/10 33K OHM J 1608	
HR307	HRFT473JBA	R CHIP	1/10 47K OHM J 1608	
HR308	HRFT123JBA	R CHIP	1/10 12K OHM J 1608	
HR309	HRFT330JBA	R CHIP	1/10 33 OHM J 1608	
HR310	HRFT102JBA	R CHIP	1/10 1K OHM J 1608	
HR311	HRFT332JBA	R CHIP	1/10 3.3K OHM J 1608	
HR312	HRF4109JEA	R CHIP	1/4 1OHM J 3216	
HR313	HRF4109JEA	R CHIP	1/4 1OHM J 3216	
HR314	HRF4109JEA	R CHIP	1/4 1OHM J 3216	

Electrical Part List

Loc.	Part Code	Part Name	Description	Remark
HR315	HRF4109JEA	R CHIP	1/4 1OHM J 3216	
HR317	HRFT473JBA	R CHIP	1/10 47K OHM J 1608	
HR318	HRFT333JBA	R CHIP	1/10 33K OHM J 1608	
HR319	HRFT223JBA	R CHIP	1/10 22K OHM J 1608	
HR320	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
HR322	HRFT000-BA	R CHIP	1/10 0 OHM J 1608	
HR324	HRFT472JBA	R CHIP	1/10 4.7K OHM J 1608	
HR325	HRFT152JBA	R CHIP	1/10 1.5K OHM J 1608	
HR326	HRFT223JBA	R CHIP	1/10 22K OHM J 1608	
HR327	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
HR328	HRFT223JBA	R CHIP	1/10 22K OHM J 1608	
HR329	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
HR330	HRFT152JBA	R CHIP	1/10 1.5K OHM J 1608	
HR331	HRFT105JBA	R CHIP	1/10 1M OHM J 1608	
HR340	HRFT102JBA	R CHIP	1/10 1K OHM J 1608	
HR341	HRFT521JBA	R CHIP	1/10 5.1K OHM J 1608	
HR342	HRFT100JBA	R CHIP	1/10 10 OHM J 1608	
HR343	HRFT100JBA	R CHIP	1/10 10 OHM J 1608	
HR344	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
HR345	HRFT332JBA	R CHIP	1/10 3.3K OHM J 1608	
HR346	HRFT104JBA	R CHIP	1/10 100K OHM J 1608	
HR347	HRFT104JBA	R CHIP	1/10 100K OHM J 1608	
HR349	HRFT000-BA	R CHIP	1/10 0 OHM J 1608	
HR351	HRFT561JBA	R CHIP	1/10 560 OHM J 1608	
HR354	HRFT000-BA	R CHIP	1/10 0 OHM J 1608	
HR401	HRFT473JBA	R CHIP	1/10 47K OHM J 1608	
HR402	HRFT473JBA	R CHIP	1/10 47K OHM J 1608	
HR403	HRFT473JBA	R CHIP	1/10 47K OHM J 1608	
HR404	HRFT473JBA	R CHIP	1/10 47K OHM J 1608	
HR405	HRFT473JBA	R CHIP	1/10 47K OHM J 1608	
HR406	HRFT473JBA	R CHIP	1/10 47K OHM J 1608	
HR409	HRFT473JBA	R CHIP	1/10 47K OHM J 1608	
HR410	HRFT473JBA	R CHIP	1/10 47K OHM J 1608	
HR412	HRFT183JBA	R CHIP	1/10 18K OHM J 1608	
HR413	HRFT332JBA	R CHIP	1/10 3.3K OHM J 1608	
HR414	HRFT122JBA	R CHIP	1/10 1.2K OHM J 1608	
HR415	HRFT220JBA	R CHIP	1/10 22 OHM J 1608	
HR416	HRFT220JBA	R CHIP	1/10 22 OHM J 1608	
HR417	HRFT220JBA	R CHIP	1/10 22 OHM J 1608	
HR418	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
HR419	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
HR420	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
HR421	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
HR422	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
HR423	HRFT104JBA	R CHIP	1/10 100K OHM J 1608	
HR424	HRFT104JBA	R CHIP	1/10 100K OHM J 1608	
HR425	HRFT102JBA	R CHIP	1/10 1K OHM J 1608	
HR426	HRFT102JBA	R CHIP	1/10 1K OHM J 1608	
HR427	HRFT104JBA	R CHIP	1/10 100K OHM J 1608	
HR428	HRFT104JBA	R CHIP	1/10 100K OHM J 1608	
HR429	HRFT750JBA	R CHIP	1/10 75 OHM J 1608	
HR430	HRFT750JBA	R CHIP	1/10 75 OHM J 1608	
HR431	HRFT102JBA	R CHIP	1/10 1K OHM J 1608	
HR432	HRFT102JBA	R CHIP	1/10 1K OHM J 1608	
HR433	HRFT102JBA	R CHIP	1/10 1K OHM J 1608	
HR434	HRFT102JBA	R CHIP	1/10 1K OHM J 1608	
HR435	HRFT104JBA	R CHIP	1/10 100K OHM J 1608	
HR436	HRFT104JBA	R CHIP	1/10 100K OHM J 1608	
HR437	HRFT102JBA	R CHIP	1/10 1K OHM J 1608	
HR438	HRFT102JBA	R CHIP	1/10 1K OHM J 1608	
HR439	HRFT104JBA	R CHIP	1/10 100K OHM J 1608	
HR440	HRFT104JBA	R CHIP	1/10 100K OHM J 1608	
HR441	HRFT750JBA	R CHIP	1/10 75 OHM J 1608	
HR442	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
HR443	HRFT104JBA	R CHIP	1/10 100K OHM J 1608	
HR444	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
HR445	HRFT104JBA	R CHIP	1/10 100K OHM J 1608	
HR446	HRFT104JBA	R CHIP	1/10 100K OHM J 1608	
HR447	HRFT750JBA	R CHIP	1/10 75 OHM J 1608	
HR448	HRFT750JBA	R CHIP	1/10 75 OHM J 1608	
HR449	HRFT222JBA	R CHIP	1/10 2.2K OHM J 1608	

Electrical Part List

Loc.	Part Code	Part Name	Description	Remark
HR450	HRFT221JBA	R CHIP	1/10 220 OHM J 1608	
HR451	HRFT000-BA	R CHIP	1/10 0 OHM J 1608	W/O Digital Audio Input
HR452	HRFT472JBA	R CHIP	1/10 4.7K OHM J 1608	
HR453	HRFT000-BA	R CHIP	1/10 0 OHM J 1608	W/O Digital Audio Input
HR454	HRFT104JBA	R CHIP	1/10 100K OHM J 1608	
HR455	HRFT104JBA	R CHIP	1/10 100K OHM J 1608	
HR459	HRFT471JBA	R CHIP	1/10 470 OHM J 1608	
HR460	HRFT104JBA	R CHIP	1/10 100K OHM J 1608	
HR461	HRFT104JBA	R CHIP	1/10 100K OHM J 1608	
HR462	HRFT471JBA	R CHIP	1/10 470 OHM J 1608	
HR463	HRFT104JBA	R CHIP	1/10 100K OHM J 1608	
HR464	HRFT821JBA	R CHIP	1/10 820 OHM J 1608	
HR465	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
HR466	HRFT104JBA	R CHIP	1/10 100K OHM J 1608	
HR467	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
HR468	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
HR469	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
HR470	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
HR471	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
HR472	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
HR473	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
HR474	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
HR475	HRFT561JBA	R CHIP	1/10 560 OHM J 1608	
HR476	HRFT561JBA	R CHIP	1/10 560 OHM J 1608	
HR477	HRFT561JBA	R CHIP	1/10 560 OHM J 1608	
HR478	HRFT561JBA	R CHIP	1/10 560 OHM J 1608	
HR479	HRFT561JBA	R CHIP	1/10 560 OHM J 1608	
HR480	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
HR481	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
HR482	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
HR483	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
HR484	HRF4220JEA	R CHIP	1/4 22 OHM J 3216	
HR485	HRF4220JEA	R CHIP	1/4 22 OHM J 3216	
HR486	HRF4220JEA	R CHIP	1/4 22 OHM J 3216	
HR487	HRF4220JEA	R CHIP	1/4 22 OHM J 3216	
HR488	HRFT562JBA	R CHIP	1/10 5.6K OHM J 1608	
HR489	HRFT562JBA	R CHIP	1/10 5.6K OHM J 1608	
HR492	HRFT123JBA	R CHIP	1/10 12K OHM J 1608	
HR493	HRFT682JBA	R CHIP	1/10 6.8K OHM J 1608	
HR494	HRFT123JBA	R CHIP	1/10 12K OHM J 1608	
HR495	HRFT682JBA	R CHIP	1/10 6.8K OHM J 1608	
HR501	HRFT104JBA	R CHIP	1/10 100K OHM J 1608	
HR502	HRFT000-BA	R CHIP	1/10 0 OHM J 1608	
HR503	HRFT330JBA	R CHIP	1/10 33 OHM J 1608	
HR504	HRFT330JBA	R CHIP	1/10 33 OHM J 1608	
HR505	HRFT000-BA	R CHIP	1/10 0 OHM J 1608	
HR506	HRFT000-BA	R CHIP	1/10 0 OHM J 1608	
HR510	HRFT000-BA	R CHIP	1/10 0 OHM J 1608	
HR511	HRFT331JBA	R CHIP	1/10 330 OHM J 1608	
HR512	HRFT102JBA	R CHIP	1/10 1K OHM J 1608	
HR513	HRFT102JBA	R CHIP	1/10 1K OHM J 1608	
HR514	HRFT330JBA	R CHIP	1/10 33 OHM J 1608	
HR515	HRFT330JBA	R CHIP	1/10 33 OHM J 1608	
HR516	HRFT330JBA	R CHIP	1/10 33 OHM J 1608	
HR517	HRFT682JBA	R CHIP	1/10 6.8K OHM J 1608	
HR518	HRFT682JBA	R CHIP	1/10 6.8K OHM J 1608	
HR519	HRFT123JBA	R CHIP	1/10 12K OHM J 1608	
HR521	HRFT682JBA	R CHIP	1/10 6.8K OHM J 1608	
HR522	HRFT183JBA	R CHIP	1/10 18K OHM J 1608	
HR523	HRFT682JBA	R CHIP	1/10 6.8K OHM J 1608	
HR524	HRFT203JBA	R CHIP	1/10 20K OHM J 1608	
HR525	HRFT512JBA	R CHIP	1/10 5.1K OHM J 1608	
HR526	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
HR527	HRFT122JBA	R CHIP	1/10 1.2K OHM J 1608	
HR529	HRFT203JBA	R CHIP	1/10 20K OHM J 1608	
HR530	HRFT683JBA	R CHIP	1/10 68K OHM J 1608	
HR532	HRFT000-BA	R CHIP	1/10 0 OHM J 1608	
HR533	HRFT472JBA	R CHIP	1/10 4.7K OHM J 1608	
HR534	HRFT333JBA	R CHIP	1/10 33K OHM J 1608	
HR535	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
HR536	HRFT104JBA	R CHIP	1/10 100K OHM J 1608	

Electrical Part List

Loc.	Part Code	Part Name	Description	Remark
HR537	HRFT330JBA	R CHIP	1/10 33 OHM J 1608	
HR538	HRFT330JBA	R CHIP	1/10 33 OHM J 1608	
HR539	HRFT330JBA	R CHIP	1/10 33 OHM J 1608	
HR540	HRFT472JBA	R CHIP	1/10 4.7K OHM J 1608	Basic
HR541	HRFT472JBA	R CHIP	1/10 4.7K OHM J 1608	DVD-Audio, DivX
HR542	HRFT472JBA	R CHIP	1/10 4.7K OHM J 1608	Basic
HR543	HRFT472JBA	R CHIP	1/10 4.7K OHM J 1608	DVD-Audio, DivX
HR544	HRFT472JBA	R CHIP	1/10 4.7K OHM J 1608	
HR546	HRFT472JBA	R CHIP	1/10 4.7K OHM J 1608	
HR548	HRFT181JBA	R CHIP	1/10 180 OHM J 1608	
HR551	HRF8101JCA	R CHIP	1/8 100 OHM J 2012	
HR552	HRF8131JCA	R CHIP	1/8 130 OHM J 2012	
HR553	HRFT472JBA	R CHIP	1/10 4.7K OHM J 1608	
HR554	HRFT181JBA	R CHIP	1/10 180 OHM J 1608	
HR601	HRFT750JBA	R CHIP	1/10 75 OHM J 1608	
HR602	HRFT750JBA	R CHIP	1/10 75 OHM J 1608	
HR603	HRFT750JBA	R CHIP	1/10 75 OHM J 1608	
HR604	HRFT750JBA	R CHIP	1/10 75 OHM J 1608	
HR605	HRFT750JBA	R CHIP	1/10 75 OHM J 1608	
HR606	HRFT750JBA	R CHIP	1/10 75 OHM J 1608	
HR607	HRFT750JBA	R CHIP	1/10 75 OHM J 1608	
HR608	HRFT750JBA	R CHIP	1/10 75 OHM J 1608	
HR609	HRFT750JBA	R CHIP	1/10 75 OHM J 1608	
HR610	HRFT750JBA	R CHIP	1/10 75 OHM J 1608	
HR611	HRFT750JBA	R CHIP	1/10 75 OHM J 1608	
HR612	HRFT750JBA	R CHIP	1/10 75 OHM J 1608	
HR613	HRFT750JBA	R CHIP	1/10 75 OHM J 1608	
HR614	HRFT473JBA	R CHIP	1/10 47K OHM J 1608	
HR615	HRFT332JBA	R CHIP	1/10 3.3K OHM J 1608	
HR616	HRFT391JBA	R CHIP	1/10 390 OHM J 1608	
HR617	HRFT473JBA	R CHIP	1/10 47K OHM J 1608	
HR618	HRFT750JBA	R CHIP	1/10 75 OHM J 1608	
HR619	HRFT391JBA	R CHIP	1/10 390 OHM J 1608	
HR620	HRFT473JBA	R CHIP	1/10 47K OHM J 1608	
HR621	HRFT750JBA	R CHIP	1/10 75 OHM J 1608	
HR622	HRFT391JBA	R CHIP	1/10 390 OHM J 1608	
HR623	HRFT473JBA	R CHIP	1/10 47K OHM J 1608	
HR624	HRFT750JBA	R CHIP	1/10 75 OHM J 1608	
HR625	HRFT750JBA	R CHIP	1/10 75 OHM J 1608	
HR627	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
HR628	HRFT102JBA	R CHIP	1/10 1K OHM J 1608	
HR801	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
HR802	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
HR803	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
HR804	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
HR805	HRFT471JBA	R CHIP	1/10 470 OHM J 1608	
HR806	HRFT471JBA	R CHIP	1/10 470 OHM J 1608	
HR807	HRFT471JBA	R CHIP	1/10 470 OHM J 1608	
HR808	HRFT471JBA	R CHIP	1/10 470 OHM J 1608	
HR809	HRFT471JBA	R CHIP	1/10 470 OHM J 1608	
HR810	HRFT471JBA	R CHIP	1/10 470 OHM J 1608	
HR811	HRFT471JBA	R CHIP	1/10 470 OHM J 1608	
HR812	HRFT471JBA	R CHIP	1/10 470 OHM J 1608	
HR813	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
HR814	HRFT473JBA	R CHIP	1/10 47K OHM J 1608	
HR815	HRF4220JEA	R CHIP	1/4 22 OHM J 3216	
HR816	HRF4220JEA	R CHIP	1/4 22 OHM J 3216	
HR817	HRF4220JEA	R CHIP	1/4 22 OHM J 3216	
HR818	HRF4220JEA	R CHIP	1/4 22 OHM J 3216	
HR819	HRF4220JEA	R CHIP	1/4 22 OHM J 3216	
HR820	HRF4220JEA	R CHIP	1/4 22 OHM J 3216	
HR821	HRF4220JEA	R CHIP	1/4 22 OHM J 3216	
HR822	HRF4399JEA	R CHIP	1/4W 3.9 OHM J 3216	
HR823	HRF4399JEA	R CHIP	1/4W 3.9 OHM J 3216	
HR824	HRF4399JEA	R CHIP	1/4W 3.9 OHM J 3216	
HR825	HRF4399JEA	R CHIP	1/4W 3.9 OHM J 3216	
HR826	HRF4399JEA	R CHIP	1/4W 3.9 OHM J 3216	
HR827	HRF4399JEA	R CHIP	1/4W 3.9 OHM J 3216	
HR828	HRF4569JEA	R CHIP	1/4W 5.6 OHM J 3216	
HR829	HRF4569JEA	R CHIP	1/4W 5.6 OHM J 3216	
HR830	HRF4569JEA	R CHIP	1/4W 5.6 OHM J 3216	

Electrical Part List

Loc.	Part Code	Part Name	Description	Remark
HR831	HRF4569JEA	R CHIP	1/4W 5.6 OHM J 3216	
HR832	HRF4399JEA	R CHIP	1/4W 3.9 OHM J 3216	
HR833	HRF4399JEA	R CHIP	1/4W 3.9 OHM J 3216	
HR834	HRF4399JEA	R CHIP	1/4W 3.9 OHM J 3216	
HR835	HRF4399JEA	R CHIP	1/4W 3.9 OHM J 3216	
HZ201	DMTZ30B---	DIODE ZENER CHIP	UDZS30B 17x12	
HZ202	DMTZ4R3B-	DIODE ZENER CHIP	UDZS4.3B 17x12	
IC201	1STA308A--	IC	STA308A DDX	
IC202	1LD1117S33	IC	LD1117AS33TR SOT-223	
IC204	174HC14PWR	IC	SN74HC14PWR TSSOP	
IC205	174HC14PWR	IC	SN74HC14PWR TSSOP	
IC206	174HC00PWR	IC	SN74HC00PWR TSSOP	
IC207	174HC244NS	IC	SN74HC244NSR SOP	
IC208	174HC374NS	IC	SN74HC374NSR SOP	
IC301	1ES6603S--	IC	RFAMP IC, ES6603S	
IC302	1FAN8024CD	IC	IC, MOTOR DRIVE	
IC303	1BA6287F--	IC	BA6287F DRIVER	
IC304	1TL3472CD-	IC	OPAMP, TL3472	
IC401	1AK5365VQ-	IC	AK5365 ADC	
IC402	1NJM4558M-	IC	NJM4558M	
IC403	174HCU04PW	IC	SN74HCU04PWR TSSOP	
IC404	1TXOC0805-	IC	OC0805-TX	
IC405	1RXOC0805-	IC RX	OC0805-RX	With Digital Audio Input
IC406	1AK4117---	IC DIR	AK4117 DIR	With Digital Audio Input
IC407	174HC14PWR	IC	SN74HC14PWR TSSOP	
IC408	1CS4360---	IC	CS4360 6CH DAC	
IC409	1NJM4558M-	IC	NJM4558M	
IC410	1BA4560F--	IC	BA4560F	
IC411	1NJM4558M-	IC	NJM4558M	
IC501	1ES6629FD-	IC	MPEG DECODER ES6629FD	Basic Default
	1ES6698FD-	IC	MPEG DECODER ES6698FD	DVD-Audio, DivX
IC502	1L128168A-	IC	M12L128168A SDRM(128M)	DVD-Audio, DivX
	1S42S1640-	IC	S42S1640 SDRAM(64M)	Basic Default
IC503	1M29W160EB	IC	M29W160DB FLASH(16M)	DVD-Audio, DivX
	1M29W800DB	IC	M29W800DB FLASH(8M)	Basic Default
IC504	1M24C04MN-	IC	M24C04MN SOP	
IC505	1LD1117A33	IC	LD1117ADT33 DPAK	
IC506	1LD1117A-R	IC	LD1117ADT-R DPAK	
IC507	174HCU04PW	IC	SN74HCU04PWR TSSOP	
IC508	1V6309MSP3	IC	RESET IC, V6309 MSP3B	
IC601	1BA7660FS-	IC	BA7660FS 75 OHM DRIVER	
IC602	1LA7952---	IC	LA7952	
IC806	1STA505---	IC PWM AMP	STA505 PWM AMP	HC-4150/60 : 120V(90V~135V) HC-4150/60 : 230V(180~265V)
	1STA506---	IC PWM AMP	STA506 PWM AMP	HC-4180 All
IC807	1STA505---	IC PWM AMP	STA505 PWM AMP	HC-4150/60 : 120V(90~135V) HC-4150/60 : 230V(180~265V)
	1STA506---	IC PWM AMP	STA506 PWM AMP	HC-4180 All
IC808	1STA505---	IC PWM AMP	STA505 PWM AMP	HC-4150/60 : 120V(90~135V) HC-4150/60 : 230V(180~265V)
	1STA506---	IC PWM AMP	STA506 PWM AMP	HC-4180 All
IC809	1STA505---	IC PWM AMP	STA505 PWM AMP	HC-4150/60 : 120V(90~135V) HC-4150/60 : 230V(180~265V)
	1STA506---	IC PWM AMP	STA506 PWM AMP	HC-4180 All
J401	9736327800	JACK RCA	RCA-603EA-06 (BBY 6P, Shield plate)	
J402	9736328100	JACK S-VIDEO	R102-D04KA-07 (S-VIDEO+RCA, Shield plate)	With Digital Audio Input
	9736328300	JACK S-VIDEO	DIN-409A(Shield plate)	W/O Digital Audio Input
J403	9736324800	JACK SCART	SCART RGB-14	Europe Only HC-4130/50/60 : 180~265V(CE)
J404	9736327600	JACK RCA	RCA-603EA-32 (RGB 6P, Shield plate)	With Progressive Europe/America HC-4130/50/60 : 90V~135V(UL)
	9736328500	JACK RCA	RCA-303A-21 (RGB 3P, Shield plate)	Without Progressive Europe/America HC-4130/50/60 : 180~265V(CE)
J801	9736325000	JACK SPK	PA1220601P	
L801	5LC150K846	COIL	15UH LPF(SPK)	
L802	5LC150K846	COIL	15UH LPF(SPK)	
L803	5LC150K846	COIL	15UH LPF(SPK)	
L804	5LC150K846	COIL	15UH LPF(SPK)	
L805	5LC150K846	COIL	15UH LPF(SPK)	

Electrical Part List

Loc.	Part Code	Part Name	Description	Remark
L806	5LC150K846	COIL	15UH LPF(SPK)	
L807	5LC150K846	COIL	15UH LPF(SPK)	
L808	5LC150K846	COIL	15UH LPF(SPK)	
L809	5LC150K846	COIL	15UH LPF(SPK)	
L810	5LC150K846	COIL	15UH LPF(SPK)	
L811	5LC100K845	COIL	10MH LPF(SPK)	
L812	5LC100K845	COIL	10MH LPF(SPK)	
XC401	5XJ12R288E	X-TAL	12.288MHZ HC-49/US (RADIAL/SMD)	With Digital Audio Input
XC501	5XJ27M000E	X-TAL	27MHZ HC-49/US (RADIAL/SMD)	

PCB FRONT ASS'y [9CDC071300] : HC-4150

Loc.	Part Code	Part Name	Description	Remark
B700	9CD6592300	PCB FRONT		
CE701	CEXP1H229V	C ELECTRO	50V REM 2.2MF (4X5) TP	
CE702	CEXP1H229V	C ELECTRO	50V REM 2.2MF (4X5) TP	
CE703	CEXP1E470V	C ELECTRO	25V REM 47MF (6.4X6) TP	
CE704	CEXP1E470V	C ELECTRO	25V REM 47MF (6.4X6) TP	
CE705	CEXP1E470V	C ELECTRO	25V REM 47MF (6.4X6) TP	
CF701	5P1H101MF-	LC FILTER	CFI 06B 1H 101MF	
CF702	5P1H101MF-	LC FILTER	CFI 06B 1H 101MF	
CF703	5P1H101MF-	LC FILTER	CFI 06B 1H 101MF	
CN701	9728822900	CONN AS	UL1007 #26 Pitch2.0 13P+13P 280mm Board in	
CN702	9728823000	CONN AS	UL1007 #28 Pitch 2.0 11P+5P/6P 220mm(5P)+90mm(6P)	
CN903	9728822800	CONN AS	UL1007 #26 Pitch2.0 5P+5P 160mm Board in	
FL701	DHNV12SS29	FL DISPLAY	HNV-12SS29	
HC701	HCQK101JBA	C CHIP CERA	50V CH 100PF J 1608	
HC702	HCQK101JBA	C CHIP CERA	50V CH 100PF J 1608	
HC703	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC704	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC705	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC706	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HC707	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF Z 1608	
HD701	DZDS160---	DIODE SW CHIP	KDS 160	
HD702	DZDS160---	DIODE SW CHIP	KDS 160	
HD703	DZDS160---	DIODE SW CHIP	KDS 160	
HD704	DZDS160---	DIODE SW CHIP	KDS 160	
HR701	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
HR702	HRFT100JBA	R CHIP	1/10 10 OHM J 1608	
HR703	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
HR704	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
HR705	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
HR706	HRFT823JBA	R CHIP	1/10 82K OHM J 1608	
HR707	HRF4331JEA	R CHIP	1/4 330 OHM J 3216	
HR708	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
HR709	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
HR712	HRF4331JEA	R CHIP	1/4 330 OHM J 3216	
HR713	HRF4331JEA	R CHIP	1/4 330 OHM J 3216	
HZ701	DMTZ4R3B-	DIODE ZENER CHIP	UDZS4.3B 17x12	
HZ702	DMTZ4R3B-	DIODE ZENER CHIP	UDZS4.3B 17x12	
IC701	1PT6315---	IC	PT6315	
J701	9736325300	JACK H/P	HTJ-035-18A (H/P)	
JW701	W581GY7595	WIRE JUMPER	AWG22 1/0.65 SN 7.5 AUTO	
JW702	W581GY1005	WIRE JUMPER	AWG22 1/0.65 SN 10 AUTO	
JW703	W581GY7595	WIRE JUMPER	AWG22 1/0.65 SN 7.5 AUTO	
JW704	W581GY6095	WIRE JUMPER	AWG22 1/0.65 SN 6 AUTO	
JW705	W581GY7595	WIRE JUMPER	AWG22 1/0.65 SN 7.5 AUTO	
JW706	W581GY7595	WIRE JUMPER	AWG22 1/0.65 SN 7.5 AUTO	
JW707	W581GY12J5	WIRE JUMPER	AWG22 1/0.65 SN 12.5 AUTO	
JW708	W581GY12J5	WIRE JUMPER	AWG22 1/0.65 SN 12.5 AUTO	
JW709	W581GY7595	WIRE JUMPER	AWG22 1/0.65 SN 7.5 AUTO	
JW710	W581GY1005	WIRE JUMPER	AWG22 1/0.65 SN 10 AUTO	
JW711	W581GY7595	WIRE JUMPER	AWG22 1/0.65 SN 7.5 AUTO	
JW712	W581GY6095	WIRE JUMPER	AWG22 1/0.65 SN 6 AUTO	
JW713	W581GY12J5	WIRE JUMPER	AWG22 1/0.65 SN 12.5 AUTO	
JW714	W581GY6095	WIRE JUMPER	AWG22 1/0.65 SN 6 AUTO	
JW715	W581GY1005	WIRE JUMPER	AWG22 1/0.65 SN 10 AUTO	
JW716	W581GY17J5	WIRE JUMPER	AWG22 1/0.65 SN 17.5 AUTO	

Electrical Part List

Loc.	Part Code	Part Name	Description	Remark
JW717	W581GY7595	WIRE JUMPER	AWG22 1/0.65 SN 7.5 AUTO	
JW718	W581GY12J5	WIRE JUMPER	AWG22 1/0.65 SN 12.5 AUTO	
JW719	W581GY1005	WIRE JUMPER	AWG22 1/0.65 SN 10 AUTO	
JW720	W581GY6095	WIRE JUMPER	AWG22 1/0.65 SN 6 AUTO	
JW721	W581GY6095	WIRE JUMPER	AWG22 1/0.65 SN 6 AUTO	
JW722	W581GY1005	WIRE JUMPER	AWG22 1/0.65 SN 10 AUTO	
JW723	W581GY12J5	WIRE JUMPER	AWG22 1/0.65 SN 12.5 AUTO	
JW724	W581GY7595	WIRE JUMPER	AWG22 1/0.65 SN 7.5 AUTO	
JW725	W581GY12J5	WIRE JUMPER	AWG22 1/0.65 SN 12.5 AUTO	
JW726	W581GY1005	WIRE JUMPER	AWG22 1/0.65 SN 10 AUTO	
LD702	DLBH4155--	LED	LBH4155 (BL) OVAL PI4.3	
LD703	DLBH4155--	LED	LBH4155 (BL) OVAL PI4.3	
RM701	1HK381BT19	IC RMC	HK381B T-19DP	
VR701	5SH122403-	SW ENCODER	EC12E24204A9	

PCB KEY ASS'y [9CDC071400] : HC-4150

Loc.	Part Code	Part Name	Description	Remark
B701	9CD6592400	PCB KEY	HC-4150	
CW703	9728808600	CONN WAFER	PH-06AW	
SW703	5S51616C--	SW TACT	KQG906	
SW704	5S51616C--	SW TACT	KQG906	
SW705	5S51616C--	SW TACT	KQG906	
SW706	5S51616C--	SW TACT	KQG906	
SW707	5S51616C--	SW TACT	KQG906	
SW708	5S51616C--	SW TACT	KQG906	

PCB POWER ASS'y [9CDC071500] : HC-4150

Loc.	Part Code	Part Name	Description	Remark
B702	9CD6592401	PCB POWER	HC-4150	
CW702	9728810901	CONN WAFER	PH-05AW	
LD701	DSLR332VC3F	LED	SLR332VC3F(RED)PI3	
SW702	5S50101002	SW TACT	KPT-1105A 1C-2P	

PCB SMPS ASS'y [9CDC071200] : HC-4150

Loc.	Part Code	Part Name	Description	Remark
B901	9CD6592800	PCB SMPS	CEM-1 106X156(XD500N)	
CC901	CL1GB1152K	C CERA(Y-CAP)	250V 152 Y-1	
CC902	CL1GB1152K	C CERA(Y-CAP)	250V 152 Y-1	
CC903	CCXB3A331K	C CERA	1KV B 330PF K (FORMING)	
CC904	CCFF1H104Z	C CERA	HIKF 50V 0.1MF Z (FORMING)	
CC905	CCFF1H104Z	C CERA	HIKF 50V 0.1MF Z (FORMING)	
CC906	CCXB3A472K	C CERA	1KV B 4700PF K (FORMING)	
CC909	CL1GB1152K	C CERA(Y-CAP)	250V 152 Y-1	
CC910	CCXB3A102K	C CERA	1KV B 1000PF K (FORMING)	
CC911	CCXB3A102K	C CERA	1KV B 1000PF K (FORMING)	
CC912	CCXB3A102K	C CERA	1KV B 1000PF K (FORMING)	
CC913	CCXB3A102K	C CERA	1KV B 1000PF K (FORMING)	
CC915	CCXB3A102K	C CERA	1KV B 1000PF K (FORMING)	
CC916	CCFF1H104Z	C CERA	HIKF 50V 0.1MF Z (FORMING)	
CC917	CCFF1H104Z	C CERA	HIKF 50V 0.1MF Z (FORMING)	
CC918	CCFF1H104Z	C CERA	HIKF 50V 0.1MF Z (FORMING)	
CC919	CCFF1H104Z	C CERA	HIKF 50V 0.1MF Z (FORMING)	
CE901	CEXN2D221P	C ELECTRO	220uF 200V LHS	HC-4130 All Model HC-4150/60 : 90V~135V(UL)
	CEXN2D331P	C ELECTRO	330uF 200V LHS	HC-4130/50/60 : 180~265V(CE) HC-4180 All Model
CE902	CEXN2D221P	C ELECTRO	220uF 200V LHS	HC-4130 All Model HC-4150/60 : 90V~135V(UL)
	CEXN2D331P	C ELECTRO	330uF 200V LHS	HC-4130/50/60 : 180~265V(CE) HC-4180 : All Model
CE904	CEXF1H109V	C ELECTRO	50V RSS 1MF (5X11) TP	
CE905	CEXF1V470C	C ELECTRO	47uF/35V RUS 105℃	
CE906	CEXF1H222C	C ELECTRO	2200uF 50V RUS 105℃	HC-4180 All Model
	CEXF1V222C	C ELECTRO	2200uF 35V RUS 105℃	HC-4130 All Model HC-4150/60 : 90V~135V HC-4150/60 : 180~265V
CE907	CEXF1H102V	C ELECTRO	1000uF 50V	HC-4180 All Model
	CEXF1V102V	C ELECTRO	1000uF 35V	HC-4130 All Model HC-4150/60 : 90V~135V HC-4150/60 : 180~265V
CE908	CEXF1E471C	C ELECTRO	470uF/25V RUS 105℃	

Electrical Part List

Loc.	Part Code	Part Name	Description	Remark
CE909	CEXF1C471V	C ELECTRO	470uF/16V RSS	
CE910	CEXF1H221C	C ELECTRO	220uF 50V RUS 105℃	HC-4180 All Model
	CEXF1V221C	C ELECTRO	220uF 35V RUS 105℃	HC-4130 All Model HC-4150/60 : 90V~135V HC-4150/60 : 180~265V
CE911	CEXF1E101V	C ELECTRO	100uF/25V RSS	
CE912	CEXF1A471C	C ELECTRO	470uF/10V RUS 105℃	
CE915	CEXF1A222C	C ELECTRO	2200uF/10V RUS 105℃	
CE916	CEXF1A102V	C ELECTRO	1000uF/10V RSS	
CE981	---	---	Open	90V~135V, 180~265V
	CEXF2G479C	C ELECTRO	400V 4.7uF RUS 105℃	Free Volt
CE982	---	---	Open	90V~135V, 180~265V
	CEXF1H109C	C ELECTRO	50V 1uF RUS 105℃	Free Volt
CM901	CMXK1J104J	C MYLAR	MC 63V 104 J	
CM902	CMXK1J104J	C MYLAR	MC 63V 104 J	
CM903	CMXK1J104J	C MYLAR	MC 63V 104 J	
CM904	CMXK1J104J	C MYLAR	MC 63V 104 J	
CM981	---	---	Open	90V~135V, 180~265V
	CMXM1H104J	C MYLAR	50V 0.1uF J	Free Volt
CN992	9728822400	CONN AS	#22 P=2.0 4P+4P 200MM MAIN	
CN993	9728822500	CONN AS	#22 P=2.0 12P+12P 150MM MAIN	
CW903	2001-WS-05	CONN WAFER	5P 2.0MM	
CW981	9728808100	CONN WAFER	GP390-03P-TS-M(W/O CENTER)	
CW992	2001-WS-04	CONN WAFER	4P 2.0MM	
CW993	2001-WS-12	CONN WAFER	12P 2.0MM	
CX901	CL1BB3334K	C CERA(X-CAP)	275V 334(X-CAP) 436D	
CX902	CL1BB3334K	C CERA(X-CAP)	275V 334(X-CAP) 436D	
CX981	---	---	Open	90V~135V, 180~265V
	CL1BB3104J	C X-CAP	275V 0.1uF	Free Volt
D901	DGBJ1006--	DIODE RECTI	GBJ1006	HC-4180 All Model
	DKBJ604G--	DIODE RECTI	KBJ604G	HC-4130 All Model HC-4150/60 : 90V~135V HC-4150/60 : 180~265V
D902	DUF4007---	DIODE	UF4007	
D903	DUF4007---	DIODE	UF4007	
D904	DUF4007---	DIODE	UF4007	
D905	DUF4004---	DIODE	UF4004	
D906	DFCF16A20-	DIODE UF	DFCF16A20(UFF160-02CT)	HC-4130 All Model HC-4150/60 : 90V~135V HC-4150/60 : 180~265V
	DUFF20002C	DIODE UF	UFF200-02CT	HC-4180 All Model
D907	DUF4004---	DIODE	UF4004	
D908	DUF4004---	DIODE	UF4004	
D909	DUF4004---	DIODE	UF4004	
D910	DUF4004---	DIODE	UF4004	
D911	DUF4004---	DIODE	UF4004	
D912	DUF4004---	DIODE	UF4004	
D913	DFSF05A60	DIODE Shottkey	FSF05A60	
D981	---	---	Open	90V~135V, 180~265V
	DUF4007---	DIODE UF	UF4007	Free Volt
F901	5FSGB3122L	FUSE GLASS TUBE	VDE TL 3.15A 250V MF51	
FC901	9734600800	FUSE CLIP	PI5.2 - REEL	
FC902	9734600800	FUSE CLIP	PI5.2 - REEL	
G901	9CD6450600	Terminal GND	STS 0.5T	
G902	9CD6450600	Terminal GND	STS 0.5T	
G903	9CD6450600	Terminal GND	STS 0.5T	
G904	9CD6450600	Terminal GND	STS 0.5T	
HS981	9CD4406601		HEAT SINK TRIAC	Free Volt
	---	---	Open	180~265V Only
IC901	1KA1M0880D	IC POWER SW	KA1M0880D	
IC902	1KA5M0265R	IC POWER SW	KA5M0265R	
IC903	1ET1103---	IC PHOTO COUPLER	ET1103	
IC904	1ET1103---	IC PHOTO COUPLER	ET1103	
IC905	1ET1103---	IC PHOTO COUPLER	ET1103	
IC906	1KIA7912AP	IC	KIA7912AP (MOLD)	
IC907	1TL431A---	IC SHUNT REG	TL431	
IC908	1TL431A---	IC SHUNT REG	TL431	
IC981	---	---	Open	90~135V, 180~265V
	1STR83145-	IC TRIAC	STR83145	Free Volt
JW901	W581GY12J5	WIRE JUMPER	AWG22 1/0.65 SN 12.5 AUTO	HC-4130/50/60 : 90V~135V(UL)
	---	---	Open	90~135V, 180~265V Only

Electrical Part List

Loc.	Part Code	Part Name	Description	Remark
JW903	W581GY1505	WIRE JUMPER	AWG22 1/0.65 SN 17.5 AUTO	
JW906	W581GY12J5	WIRE JUMPER	AWG22 1/0.65 SN 12.5 AUTO	
JW907	W581GY1505	WIRE JUMPER	AWG22 1/0.65 SN 17.5 AUTO	
JW908	W581GY12J5	WIRE JUMPER	AWG22 1/0.65 SN 12.5 AUTO	
JW909	W581GY1005	WIRE JUMPER	AWG22 1/0.65 SN 10 AUTO	
JW910	W581GY1505	WIRE JUMPER	AWG22 1/0.65 SN 17.5 AUTO	
JW911	W581GY1005	WIRE JUMPER	AWG22 1/0.65 SN 10 AUTO	
JW914	W581GY1005	WIRE JUMPER	AWG22 1/0.65 SN 10 AUTO	
JW915	W581GY1005	WIRE JUMPER	AWG22 1/0.65 SN 10 AUTO	
JW917	W581GY1005	WIRE JUMPER	AWG22 1/0.65 SN 10 AUTO	
JW918	W581GY12J5	WIRE JUMPER	AWG22 1/0.65 SN 12.5 AUTO	
JW924	W581GY1005	WIRE JUMPER	AWG22 1/0.65 SN 10 AUTO	
JW925	W581GY7595	WIRE JUMPER	AWG22 1/0.65 SN 7.5 AUTO	
JW927	W581GY12J5	WIRE JUMPER	AWG22 1/0.65 SN 12.5 AUTO	
JW930	W581GY1505	WIRE JUMPER	AWG22 1/0.65 SN 17.5 AUTO	
JW931	W581GY7595	WIRE JUMPER	AWG22 1/0.65 SN 7.5 AUTO	
JW932	W581GY1005	WIRE JUMPER	AWG22 1/0.65 SN 10 AUTO	
JW933	W581GY1005	WIRE JUMPER	AWG22 1/0.65 SN 10 AUTO	
JW934	W581GY12J5	WIRE JUMPER	AWG22 1/0.65 SN 12.5 AUTO	
JW935	W581GY1005	WIRE JUMPER	AWG22 1/0.65 SN 10 AUTO	
JW936	W581GY1005	WIRE JUMPER	AWG22 1/0.65 SN 10 AUTO	
L901	5LF101K002	COIL TOROIDAL	100uH Toroidal	
L902	5LF101K002	COIL TOROIDAL	100uH Toroidal	
L903	5LF204K001	LINE FILTER	SQ2424 20MH	HC-4130 All Model HC-4150/60 : 90V~135V
	5LF204K008	LINE FILTER	SQ2828 20MH	HC-4150/60 : 180~265V HC-4180 All Model
L904	5LX100J001	COIL BEAD	3.6PI X 6MM 100 OHM,100MHz	
L905	5LX100J001	COIL BEAD	3.6PI X 6MM 100 OHM,100MHz	
L906	5LFMULT007	COIL TOROIDAL	MULTI	
L907	5LF030K007	COIL BAR CORE	6X25 10uH	
L908	5LC100K005	COIL CHOKE(DRUM)	10uH	
L910	5LF100K003	COIL BAR CORE	5X25 10uH	
PT901	5TM1035920	TRANS MAIN	EC4045 HC-4180	HC-4180 All Model
	5TMWER3335	TRANS MAIN	EER3335 XD500	HC-4130 All Model HC-4150/60 : 90V~135V HC-4150/60 : 180~265V
PT902	5TMW252501	TRANS POWER	EE2525(XD500N)	
Q901	TZTA1273Y-	TR	KTA1273Y (A966Y) (KSA928A-Y)	
Q902	TZRC107M--	TR	KRC107M (DTC114YS) (KSR1006)	
Q903	TZTA1273Y-	TR	KTA1273Y (A966Y) (KSA928A-Y)	
Q904	TZTC3198Y-	TR	KTC3198Y (2SC5343) AUTO	
Q905	TZTA1046Y-	TR	KTA1046Y (KTA1366Y) AUTO	
Q906	TZTC3198Y-	TR	KTC3198Y (2SC5343) AUTO	
R901	RD-4Z105J-	R CARBON FILM	1/4 1M OHM J	
R902	RD-4Z109J-	R CARBON FILM	1/4 1 OHM J	
R903	RD-2Y124J-	R CARBON FILM	1/2 120K OHM J	
R904	RD-2Y124J-	R CARBON FILM	1/2 120K OHM J	
R905	RS03Y331J-	R METAL OXIDE FILM	3W 330 OHM J	
R909	RD-AZ151J-	R CARBON FILM	1/6 150 OHM J	
R910	RD-AZ473J-	R CARBON FILM	1/6 47K OHM J	
R911	RD-2Y474J-	R CARBON FILM	1/2 470K OHM J	
R912	RS01Y104J-	R METAL OXIDE FILM	1W 100K OHM J	
R913	RD-4Z100J-	R CARBON FILM	1/4 10 OHM J	
R914	RD-4Z100J-	R CARBON FILM	1/4 10 OHM J	
R915	RD-4Z100J-	R CARBON FILM	1/4 10 OHM J	
R916	RD-4Z100J-	R CARBON FILM	1/4 10 OHM J	
R917	RD-4Z100J-	R CARBON FILM	1/4 10 OHM J	
R919	RD-4Z100J-	R CARBON FILM	1/4 10 OHM J	
R920	RX05Y102J-	R CEMENT	5W 1K OHM J	
R921	RS01Y561J-	R METAL OXIDE FILM	1W 560 OHM J	
R922	RX05Y102J-	R CEMENT	5W 1K OHM J	
R923	RS02Y331J-	R METAL OXIDE FILM	2W 330 OHM J	
R924	RS01Y129J-	R METAL OXIDE FILM	1W 1.2 OHM J	
R925	RS01Y680J-	R METAL OXIDE FILM	1W 68 OHM J	
R926	RD-AZ153J-	R CARBON FILM	1/6 15K OHM J	
R927	RD-AZ822J-	R CARBON FILM	1/6 8.2K OHM J	
R928	RD-AZ182J-	R CARBON FILM	1/6 1.8K OHM J	
R930	RN-AZ3302F	R METAL FILM	1/6 33K OHM F(Metal 1%)	HC-4130 All Model HC-4150/60 : 90V~135V HC-4150/60 : 180~265V

Electrical Part List

Loc.	Part Code	Part Name	Description	Remark
	RN-AZ3632F	R METAL FILM	1/6 36.3K OHM F(Metal 1%)	HC-4180 All Model
R931	RN-AZ3001F	R METAL FILM	1/6 3.0K OHM F(Metal 1%)	
R932	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
R933	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J	
R934	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J	
R935	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J	
R936	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J	
R937	RD-AZ471J-	R CARBON FILM	1/6 470 OHM J	
R939	RN-AZ5281F	R METAL FILM	1/6 5.28K OHM F(Metal 1%)	
R940	RN-AZ4701F	R METAL FILM	1/6 4.7K OHM F(Metal 1%)	
R941	RD-4Z335J-	R CARBON FILM	1/4 3.3M OHM J	
R942	RD-AZ473J-	R CARBON FILM	1/6 47K OHM J	
R943	RD-AZ473J-	R CARBON FILM	1/6 47K OHM J	
R981	---	---	Open	90V~135V / 180~265V
	RD-4Z479J-	R CARBON	1/4W 4.7 Ohm J	Free Volt
TH901	DNTC-3D15F	THERMISTOR	NTC-3D15F	
VA901	D1NR10D471	VARISTOR	1NR10D471	
AC901	9728824600	CORD AC	KE-16 HVCTFK 2*0.75 1,900MM	Japan
	9728824700	CORD AC	KE-39 H03VVH2-F 2*0.75 1,900MM	Italy
	9728824800	CORD AC	KE-88 BS6500H03VVH2-F 2*0.75 1,940MM	UK
	9728824900	CORD AC	KE-01P NISPT-2 18AWG/2C 10A 125V BLACK 1,900M	America : 90V~135V(UL)
	9728825000	CORD AC	KE-21 H03VVH2-F 2*0.75 2.5A 250V 1,900MM	Europe : 180~265V(CE)
	9728825100	CORD AC	KE-12 H03VVH2-F 2*0.75 1,900MM	Australlia

BACK ASS'y [9CDM053900] : HC-4150

Loc.	Part Code	Part Name	Description	Remark
TU001	9737651601	TUNER MODULE	KST-ML114MA1-A0	FM/AM Europe 4 Gang RDS
	9737651701	TUNER MODULE	KST-ML114FA1-A0	FM Europe 4 Gang RDS
	9737651801	TUNER MODULE	KST-ML001MA1-A0	FM/AM Europe 3 Gang
	9737651901	TUNER MODULE	KST-ML001FA1-A0	FM America 3 Gang

DECK MECHA ASS'y [9CDM053500] : HC-4150

CN301	9728823300	CONN FFC	FFC Pitch0.5mm 24P 160mm C type	
CN302	9728822600	CONN AS	UL1061 #28 Pitch 2.0 5P+5P 230mm	
CN303	9728822700	CONN AS	UL1061 #28 Pitch 2.0 6P+6P 160mm	

REMOCON ASS'y [9CDM053400] : AM-43D

Loc.	Part Code	Part Name	Description	Remark
10	9CDM053400	REMOCON	AM-43D	1

SPEAKER ASS'y [9CDM054100] : DS-37VF

Loc.	Part Code	Part Name	Description	Remark
10	97C8526000	SPEAKER SATELLITE	DS-37VF-F (FRONT)	2
20	97C8526100	SPEAKER SUBWOOFER	DS-37VF-C (CENTER)	
30	97C8526200	SPEAKER SUBWOOFER	DS-37VF-R (REAR)	2
40	97C8526300	SPEAKER SUBWOOFER	DS-37VF-SW (WOOFER)	
50	9728820800	WIRE SPEAKER ASSY	DHC-X100	

PACKING ASS'y [9CDG016900] : HC-4150

Loc.	Part Code	Part Name	Description	Remark
20	9736806000	ANTENNA FM	1.2M PIG TAIL BLK	